WISDOM

THE MAGAZINE OF KNOWLEDGE FOR ALL AMERICA

CARL JUNG

ALFRED ADLER

SIGMUND FREUD

special edition | PSYCHOLOGY and THE HUMAN MIND

MAY 1957

ONE DOLLAR

WISDOM

THE MAGAZINE OF KNOWLEDGE FOR ALL AMERICA

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From the Publisher

"Know thyself," said Socrates more than 2000 years ago. Today modern psychologists and psychiatrists offer the same advice.

Psychology has been defined as the study of human behavior and experience – the study of self-understanding. Psychology extends not only the range and depth of knowledge of self but also the degree of our understanding of others. In effect, there is no aspect of life which has not gained new perspective from modern psychology.

In this special issue of WISDOM, leading psychologists present a survey of the field in all its rich variety and offer stimulating answers to the eternal question: "What is man?" This edition attempts to present in understandable form the fundamental theories of modern psychology – the principles involved in the preservation of mental health. It strives to motivate reader interest and indicate the application of these basic principles to the reader's own life.

The vital ideas of modern psychology are summarized in a series of analyses and suggestions regarding the attainment of self-understanding. The articles in this edition – representing the essence of lengthy and precise studies by specialists of the human mind – contain a minimum of abstract or technical terminology and have been chosen for their direct, easy-to-understand style of presentation.

This special issue of WISDOM is a departure from a regular issue in that it is entirely text. No photographic illustrations have been used because, in the opinion of the editors, the printed word can explain more effectively the basic ideas of psychology. The elimination of photographs has enabled maximum coverage of the major areas of psychology and has resulted in an issue with lasting reference and rereading value for layman and student alike.

Effective living is the result of the capacity to understand others. Only through learning about human beings in general and about oneself in particular can one gain insight into the human mind and advance steadily in the conquest of the unknown inner world.

Leon Gutterman

EDITOR AND PUBLISHER

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special edition

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KNIGHT DUNLAP was schooled at the University of California and at Harvard and taught psychology at the University of California, Johns Hopkins and UCLA. His "Psychology: The Science of Living" is reprinted from *Roads to Knowledge,* edited by William Allan Neilson, © and published 1937 by W. W. Norton & Co.

JOHN F. DASHIELL is a consulting editor, psychology publications, McGraw-Hill Book Co., and professor of psychology at the University of North Carolina. "The Study of Human Nature" is from *Fundamentals of General Psychology,* third edition, © 1949 by Dr. Dashiell and published by Houghton Mifflin Co.

FLOYD L. RUCH is professor of education and psychology and a consultant in the Engineering Extension Department, Pennsylvania State College. His "Modern Psychological Theory" is from the fourth edition of *Psychology and Life,* © 1953 by Scott Foresman & Co., and is used with their permission.

BARNEY KATZ is a practicing clinical psychologist, author and lecturer on psychology. He has lectured on mental hygiene at the University of Southern California and the Los Angeles County Hospital and is coauthor of several books which have been used in American colleges and universities.
LOUIS P. THORPE has collaborated with Dr. Katz on "What Makes People Act That Way," which is from their book *Understanding People in Distress,* © 1955 and published by the Ronald Press Co. Dr. Thorpe has been a consulting psychologist in Los Angeles and is professor of education and psychology at the University of Southern California.

ROSS STAGNER is professor of psychology at the University of Illinois and has had broad experience in his field in both the academic and the business world. Dr. Stagner has worked as a teacher and in the field of personnel management and is a member of the American Psychological Association.
T. F. KARWOSKI, in collaboration with Dr. Stagner, produced "Motivation of Behavior," reprinted from their book *Psychology,* © 1952 by the McGraw-Hill Book Co. Inc. Dr. Karwoski is professor and chairman of the Psychology Department, Dartmouth.

JOHN J. B. MORGAN has appeared previously in WISDOM. The current selection from his work is "Personality," a part of the second edition of his *The Psychology of Abnormal People,* © 1936 and published by Longmans, Green & Co. Dr. Morgan formerly was on the faculty of Northwestern.

ROBERT S. WOODWORTH obtained his Ph.D. degree at Columbia and studied also abroad. His work includes several books and an impressive number of contributions to professional journals. He is professor emeritus of psychology at Columbia.
DONALD G. MARQUIS, coauthor with Dr. Woodworth of "Basic Personality Types," from their book *Psychology,* fifth edition, © and published 1947 by Henry Holt & Co., is professor and chairman of the Department of Psychology at the University of Michigan.

S. H. KRAINES is a practicing psychiatrist and former assistant professor of psychiatry at the University of Illinois School of Medicine.
E. S. THETFORD has collaborated with Dr. Kraines on two books, *Managing Your Mind* and *Live and Help Live.* Their article "Mechanisms – Devices of the Mind" is from the latter book, © and published in 1951 by the Macmillan Co. Miss Thetford is on the faculty of Chicago Teachers College. Their study included several interesting case histories which were regretfully omitted here because of space limitations.

ERNEST R. HILGARD contributes two pieces to this issue. "Fear and Anxiety" and "The Thinking Process" are both taken from his book *Introduction to Psychology,* © 1953 by Harcourt, Brace & Co. Inc. and used with their permission. Dr. Hilgard is professor and chairman, Department of Psychology, Stanford University.

KARL A. MENNINGER is a practicing psychiatrist at the Menninger Clinic and clinical professor of psychiatry at the University of Kansas Medical School. "The Neurotic Type," "Moody Personalities" (originally "The Cycloid Type"), "Psychiatry" (originally "Medical Applications") and "Psychoanalysis" are from Dr. Menninger's book *The Human Mind,* © 1930, 1937, 1945 by the author and published by Alfred A. Knopf Inc.

LAURANCE FREDERIC SHAFFER is professor of education and head of the Department of Guidance, Teachers College, Columbia University. "Worry and Tension" is from his book *The Psychology of Adjustment,* © 1936 by Dr. Shaffer and published by Houghton Mifflin Co.

WENDELL W. CRUZE contributes "Emotional Control" and "IQ: Intelligence Quotient" to this issue, both from his book *General Psychology for College Students,* © and published 1951 by Prentice-Hall Inc. Dr. Cruze is professor of psychology and director of the Institute of Personality Assessment and Research, University of California.

ALLAN FROMME, psychologist and teacher, received his education at City College of New York and Columbia University. "Personal Maturity" is a part of Dr. Fromme's *The Psychologist Looks at Sex and Marriage,* © 1950 by Prentice-Hall Inc., and is used here through the courtesy of Simon & Schuster Inc.

CALVIN S. HALL was schooled at the University of Washington and the University of California and is professor of psychology at Western Reserve University. "Sigmund Freud – Founder of Psychoanalysis" forms a part of his book *A Primer of Freudian Psychology,* © 1954 and published as a "Mentor Book" by the World Publishing Co.

GARDNER MURPHY is now director of research for the Menninger Foundation and has been on the faculties of Columbia University and City College of New York. Dr. Murphy is a past president of the American Psychological Association.
FRIEDRICH JENSEN is coauthor with Dr. Murphy of "Freud's Approach to Personality," reprinted by permission from *Approaches to Personality,* © 1932 and published by Coward-McCann Inc. Dr. Jensen is a German psychiatrist.

SIGMUND FREUD's work is credited with changing man's traditional view of himself. Freud's "The Meaning of Dreams" is reprinted here by special arrangement with the publishers, Basic Books Inc., of the edition of *The Interpretation of Dreams* translated and edited by James Strachey.

JOAN CORRIE, English psychologist and author, is represented by "Jung's Approach to Personality." This article forms a part of her book *A.B.C. of Jung's Psychology,* © 1932 and published by Routledge & Kegan Paul Ltd. and used here by their permission.

W. BERAN WOLFE, in "Adler's Approach to Personality" discusses the principles of Adler's philosophy and school of psychology. It appears as the introduction to Alfred Adler's *The Pattern of Life* and is used here through the permission of Mrs. W. Beran Wolfe.

DAVID WECHSLER is chief psychologist at Bellevue Psychiatric Hospital and clinical professor of psychology at New York University. "The Meaning of Intelligence" is from *The Measurement of Adult Intelligence,* © 1944 by Dr. Wechsler and published by the Williams & Wilkins Co.

NORMAN L. MUNN is an educator and psychologist and serves as professor and head of the Department of Psychology at Bowdoin College. "The Beginning of Intelligence Tests" is a part of *Psychology – The Fundamentals of Human Adjustment,* © 1951 by Dr. Munn and published by Houghton Mifflin Co.

DONALD M. JOHNSON is author of "Creative Thought," reprinted by permission from *Essentials of Psychology,* © 1948 and published by the McGraw-Hill Book Co. Inc. Dr. Johnson is a fellow of the American Psychological Association and is on the faculty of Michigan State University.

J. P. GUILFORD is now professor of psychology at the University of Southern California. His "Factors Related to Creative Thinking" is from *General Psychology,* second edition, © and published 1952 by D. Van Nostrand Co. Inc.

LEWIS M. TERMAN is well known for his studies of gifted children. His "Psychological Studies of Genius" is from "Psychological Approaches to the Biography of Genius," which first appeared in the October 1940 issue of *Science,* published by the American Association for the Advancement of Science. Dr. Terman was professor and head of the Department of Psychology, Stanford University.

LOUIS PAUL has achieved recognition as an author of books and magazine articles. "Psychiatrist and Patient" appeared originally in the July 1953 issue of *Mental Hygiene,* published by the National Association for Mental Health Inc. Mr. Paul has written also for many popular magazines.

JOSHUA LOTH LIEBMAN has done much to dispel the idea that religion and modern psychology are incompatible. "Religion and Psychology" and "The Commandments of Modern Psychology" are from Rabbi Liebman's book *Peace of Mind,* © 1946 by the author and published by Simon & Schuster Inc.

BORIS ARTZYBASHEFF has done the illustrations on the section-heading pages of this issue. They are reprinted from *As I See,* © by the artist, and are used by permission of the publishers, Dodd, Mead & Co. Artzybasheff has painted covers for *Time, Life, Fortune* and other magazines.

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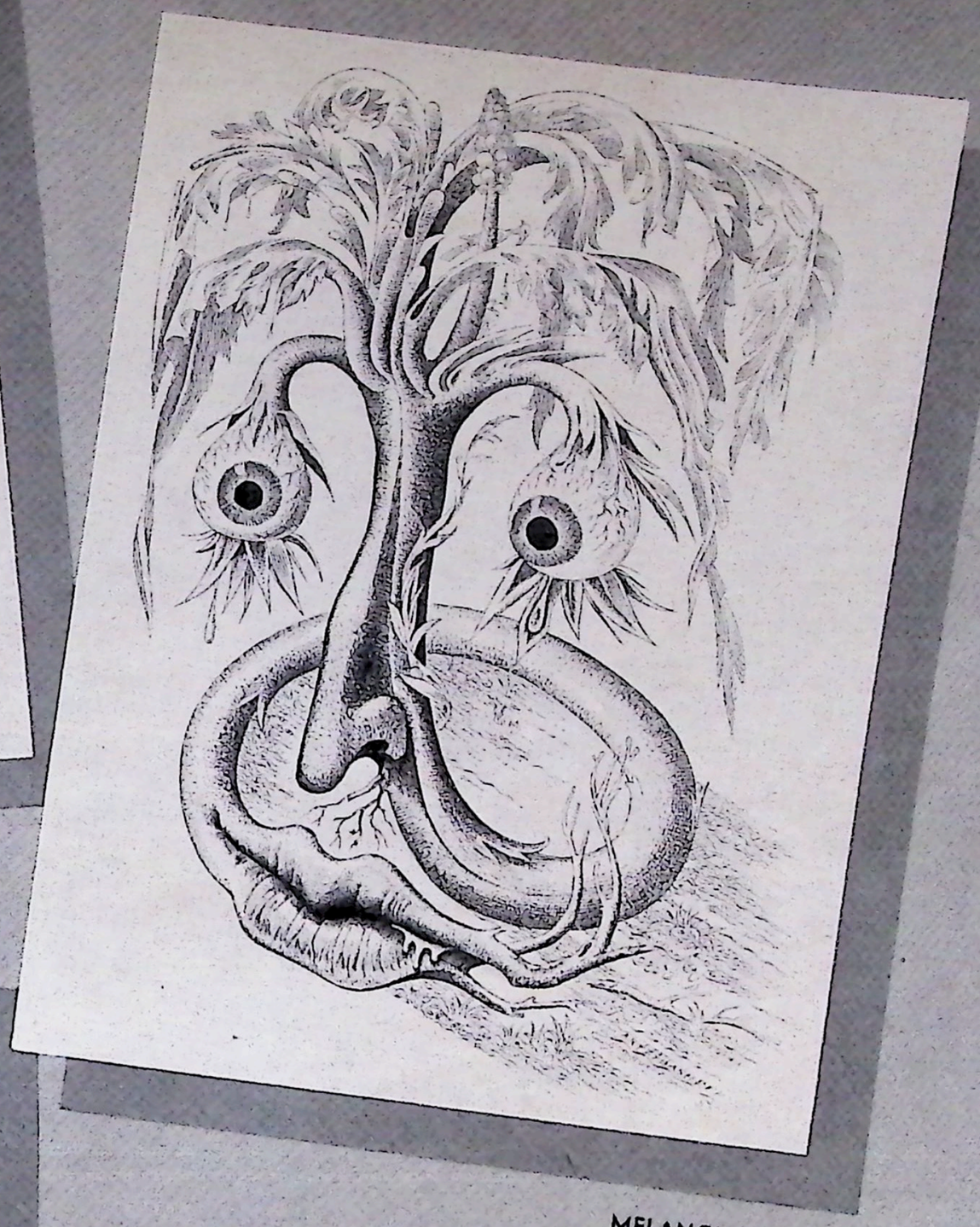
REPRESSED HOSTILITY



MELANCHOLIA

HYPOCHONDRIA

The Study of MAN'S MIND

PSYCHOLOGY: *The Science of Living*

by Knight Dunlap

If we define "psychology" as "the science of living," we shall come as near the truth as is possible in a brief statement. Various other definitions are currently used: Psychology is called the "science of the mind"; the "science of consciousness"; the "science of behavior." The first of these designations, however, is too narrow, too ambiguous, the second is hardly applicable to the modern subject and the third is perhaps too broad in one way and not broad enough in another.

The word "psychology" is derived from the Greek *psyche*, which means the "life principle" (not the "soul" in any of the several modern usages of the term), and the earliest book we have on the subject, Aristotle's *Concerning the Psyche*, is a treatise on life processes as he understood them.

Man's life, taken as a whole, is a complicated, but remarkably unified, mass of *reactions* or *responses* to his environment, physical and social. Man reacts or responds to the world about him in a number of ways. First, he *perceives* the objects and occurrences of his environment: That is one way of responding to them. In perceiving, he senses the colors, sounds, odors and other qualities of objects, but he does more than "sense." He perceives the features of his environment as objects and perceives them in characteristic relations to one another. He not only senses the color of the rose but also perceives the rose as an object in space and as a part of a rosebush. Such perceptions are a fundamental part of man's process of living. But it is not merely *objects* that are perceived; occurrences, such as the falling of the petals from the rose, are also perceived.

Second, man *thinks* about his environment. In thinking, he *remembers* objects which he has previously perceived and which perhaps no longer exist. He remembers, also, occurrences of the past, such as the fire which destroyed his house, or the first walking of his child. Thinking in another way, he *anticipates* what is yet to occur, such as going on his next vacation. He *imagines*, too, thinking of things and occurrences which he has not perceived and which may never exist or happen. All of these thinkings are really responses to his environment, including environments of the past and, in a certain sense, of the future.

Third, man *feels*. He does not feel his environment (except in another meaning of the word "feel," which is "to sense through touch"), but he feels *about* his environment. He feels angry, tired, hungry, affectionate, sorry etc. Or, to use another form of language, he feels anger, hunger, affection, sorrow; or in still another way of speaking, he is angry, hungry etc. All these forms of statement mean the same thing. Man responds to his environment not merely by perceiving it and thinking about it – he also feels about it.

We might add a fourth way in which man responds to his environment, namely, by *doing something* to it. He crushes the fly which annoys him; he roots up the plant from one place and sets it in another; he makes ink marks on the paper; he smelts the ore, tempers the steel and creates civilization. Action on the environment, however, is not something apart from perceiving, feeling and thinking. In part, such action is the result of perceiving, feeling and thinking about the environment. In part, it is even the same thing as the process of feeling, thinking or perceiving. We cannot set these processes apart from one another or over against one another.

For the sake of economy in talking about these life processes of thinking, feeling and perceiving, we need a single term that will include them all, and the term that has by long usage been set apart for this purpose is "being conscious," which phrase means just perceiving or thinking or feeling or all of them – nothing more. If a man is perceiving, we say he is conscious. If he is thinking, we say he is conscious. If he is feeling, we say he is conscious. We say he is *unconscious* when he is neither feeling, thinking nor perceiving. For convenience, we have also an abstract term, "consciousness." It gives us another way of referring to being conscious; but consciousness is not a thing or even an occurrence; it is just a way of speaking about being conscious.

For further convenience in speaking about the processes of being conscious, we use the adjective "mental." While it is true that we may formally define the word "mental" by saying that it means "pertaining to the mind," that definition tells us nothing, since we can define the mind only by reference to what the word "mental" means. All the mental processes make up the mind. That is to say, the mind is just the way in which the man (or the animal or the human race) perceives and thinks and feels. If we forget this, and consider the mind as if it were a thing, or a realm or a force, we merely lapse into superstition and make a mess of our psychology. What we must do from the very beginning, if we wish really to understand human life, is to keep clear the significance of the terms we use and constantly refer the derived terms back to the simple facts from which they are derived.

We must emphasize the point that psychology *starts* from facts and *deals* with facts. Perceiving, feeling and thinking are facts; they are not assumptions or theories. We may go on to make theories about them, but we surely go astray if we do not keep our theories and facts distinct.

Psychology, then, deals with perceiving, thinking and feeling and the acts which go with them or result from them or from parts of them. These are the great life processes, the "mental processes," with which we are concerned. Psychology sets out first to discover the various types of mental processes, to analyze them. Then it seeks to discover the laws of their occurrence: under what circumstances this sort of perception occurs; under what circumstances that thought, that feeling; and how this or that type of action is built up. Finally, it seeks to find the way of improving mental processes: how to make perception and thought more accurate; how to control feeling to the best advantage of the human being; and, more complexly, how to adjust the life processes of man to his

environment and the environment to the life processes, in order that human life shall be orderly, rich and progressive.

All the processes of life are dependent upon the organism, i.e., the body. The animal body is a wonderfully complex machine, the sole function of which is to respond to the environment. Its growth and development are in part a preparation for later responses, but growth and development are throughout life directed, and in fact produced, by the responses themselves. The responses of today are preparing the body for the responses of tomorrow; and even the food we take in is utilized in building the body only through an intricate series of responses. Some of these responses, like the movements of the stomach and intestines in digestion, are largely unconscious, largely nonmental; but even unconscious responses, if they occur, are closely tied up with the conscious responses and are influenced by them, as well as influencing them in turn. Psychology, therefore, cannot omit to study the animal body, its structure and its intimate operations. The details of this study of the mechanics of the body are the subject matter of the biological sciences—biology, anatomy, physiology—but psychology not only utilizes the results of biological study: It also contributes to biological knowledge. The mechanics of bodily operation are in many instances discoverable only after the psychology of the responses is understood. The physiology of the brain, for example, makes little contribution to psychology but is an interpretation of the anatomy and biochemistry of the brain in terms of the *facts* of thinking, feeling and perceiving.

SINCE LIFE PROCESSES are responses to the environment, they cannot be understood except as the environment is understood. The study of the physical environment is, of course, the province of the physical sciences, the bases of which are physics and chemistry. The labor of the physical scientist is directed toward transmuting the natural objects of the environment into mathematical constants and formulas, in which terms the laws of the physical universe are more accurately determined and expressed than in the simpler terms of objects and occurrences among objects. As knowledge of physics increases, the constants and the formulas are changed. The psychologist must keep up with the changes in physical sciences. He must know the facts about color, for example—not merely as it is perceived but also as the physicist formulates it—today in terms of the ether and its vibrations, tomorrow in "quanta," or in whatever other terms, when the mathematical concept we call "ether" no longer fits the increased knowledge. The psychologist does not need to be a physicist, but he needs to know enough about physics to enable him to use the physicists' latest results in his own research. For, although advances in physical science do not in any way change or unsettle the results or the conceptions of psychology, these advances continually add to the implements and techniques with which we work in our laboratories.

Closely as psychology is related to the biological sciences and the physical sciences, it is no less closely related to the social sciences. Man does not live his life in isolation but in a human environment. He responds not only to physical objects and occurrences; he responds also to other men. He perceives them and thinks about them, and his strongest and most important feelings are about them. Moreover, he acts not merely *upon* other persons but also *with* them. Groups of men acting together accomplish what the same number, acting in isolation, could not. The social relations of man determine his mental development to a large extent. On the other hand, man's mental makeup, needs and possibilities determine the organization and life of what we call "society": economic, political, religious and domestic.

Political science, economics and sociology, therefore, are necessarily based on psychology. For superficial purposes, a superficial psychology may suffice; but the present demand for a sound scientific basis for the social sciences is a demand for a more scientific and richer psychology on which to found them. Psychology has a still more intimate relation with anthropology, the study of man in his more general aspect, since not only does anthropology require a psychological foundation for the comparative study of races, cultures and civilizations, but from this study psychology also derives an important assistance in the study of individual life processes.

With these complex and intimate relations of psychology with so many sciences, it would appear to be a vast and intricate subject, requiring long and serious labor to grasp its full range. This is indeed the case. On the other hand, the principles of psychology are coherent throughout its range, and one, by taking pains to understand them and their factual basis, can derive great satisfaction and illumination by following their applications through even a limited part of the great field.

IN GENERAL, we can think of only what we have previously perceived. At first blush, this statement may seem exaggerated; but on careful examination of the facts we find it to be sound. The application to memory (and to certain types of imagination) is rather obvious; the application to constructive or creative thought and to anticipatory thinking offers the apparent difficulty.

By *imagination* in general we mean thinking of some absent or nonexistent object, situation, occurrence or relation which is of a type that might be perceived by a normal man—if the object or situation were present. Where what is imagined is actually something which has been perceived previously by the individual who imagines it, we call the process "reproductive imagination." This is an unfortunate term, as nothing is really reproduced; but the usage has come about through a rather free use of metaphor. If that which is imagined is recognized as what has been previously perceived, then we call the process "memory" or "remembering." For example: I chanced, a moment ago, to think of a tree of a certain size, species and shape. If that had been all, I would now say I merely *imagined* a tree. But I also thought of the tree as one which I have often seen and admired, growing in a certain place. That is, I did not merely imagine a tree; I *remembered* a tree. Now what is the difference in the process? If I had merely imagined the tree, it would have been because I previously perceived one. What additional factor in the process added the reference to the past? This is a question we cannot answer. We can state the psychological facts, but we cannot explain them. No doubt, at some time in

the future, we shall be able to point out the exact feature in response which makes memory out of imagination, but that is a problem which psychology has yet to solve.

I can also *anticipate* a tree; I can think of a tree which does not yet exist but which I foresee as growing in a certain spot on my land. This is in a sense the opposite of memory: I imagine, but I date that which I imagine as in the future. We are as ignorant of how this is done as we are in the case of memory, but the fact remains that we do it.

In most cases of anticipation I am really imagining some tree which I have seen previously, but, instead of remembering it, I put it into the future. In many cases, however, the thing or the occurrence which I imagine is not one I have perceived. In such a case, what is imagined is not a thing at all but would have to be described as a composite of a number of different objects which I have seen. For example: I have seen trees of various kinds. I may therefore imagine a tree having some of the features of one tree, some of others. I may in this way imagine what is quite possible, that is, what could exist, or may imagine the impossible, such as a tree with leaves of the pine, bark of the eucalyptus and fruit of the banana. In the past, men have imagined griffins with the bodies of lions and wings of eagles—and many other impossible things. Occurrences which are impossible may also be imagined, by thinking of a number of happenings, each drawn from a different actual situation. Now this is what we call "creative" or "constructive imagination" and may, when adequately directed, lead us to great heights of artistic construction, invention and scientific discovery; or it may lead to mere amusement or to deep superstition.

How does all this fit into the conception of mental processes as responses? The movements which occur in body and speech organs have been demonstrated for thinking as thoroughly as for perception. The existence of these movements is demonstrable by refined laboratory technique in a great number of cases where for ordinary observation they are not discernible. In both thinking and perception, there do indeed appear in adults a great many cases where even the most delicate instruments fail to record movements of muscles which can be tied up with the thought or perception processes. Apparently there comes a time in the development of any particular type of these conscious responses when they are completely automatic and muscular participation is no longer required. This fact requires further addition to our response hypothesis, but the nature of the necessary additions is already suspected and the response hypothesis itself is not thereby disturbed. Primarily, and while particular lines of thinking are being learned, thinking is a complete response. Later, it may be an incomplete or short-circuited response.

A complete response, however, requires stimulation of sensory nerve terminals. Where are the nerve terminals for the thinking responses? Stimulation of the ordinary sense organs, it seems, produces perception; these will not do for thought.

This difficulty, which was the first to come up when the response hypothesis emerged as an explicit basis for modern psychology, has been solved. The dependence of thinking upon previous perception, which we have already described, and the known facts of the "association of ideas" which we will shortly discuss, taken together with the anatomy of the nervous system and the muscles, supplied the answer. The nerve terminals of the muscular sense, located among the fibers of the muscles of the body, are the "sense organs" for thought response. These alone can fill the requirements, and they fill them admirably. A full discussion of the mode of action of these sensory terminals is impossible in this brief chapter, and it suffices to say here that the actions of these organs, like those of the muscles in which they lie, are finally dispensed with as we perfect and crystallize our thinking, their functions being taken over by other structures with which their actions are related. The important point is that these other structures must be trained by the muscles and the muscular sensory terminals before they can substitute for them.

One of the earliest noted characteristics of the total thinking process is that our thinkings, or "ideas" as they are abstractly called, follow one another—and follow perceptions, in orderly and systematic ways. I see or hear something, and that "makes me think of" something else. Then from that thought I pass to another thought "called up" by the first one. This is the result of what we call "association": the linking or chaining together of perceptions and thoughts in our past experience. The facts of association have been known for centuries, but the explanation has waited for the modern discovery of the fundamental function of response in the mental life.

When we look at responses, even from the biological point of view, we see that the phenomenon of association or linkage clearly occurs there. By practice, i.e., repetition of the performance, a whole series of activities may be chained together into a systematic whole, so that the first of the units in the chain sets off the second, the second sets off the third etc. For instance: In pitching a ball, the ball is grasped, the arm raised, drawn back, propelled violently forward again, and at the proper place in the swing the ball is released. It is obvious that each of these sections of the total process must furnish the cue or *stimulus* to the next section, or the act could not be properly performed.

The essential mechanism of such a chain is fairly clear. Each act in the series involves the contraction of muscles, and these contractions, by stimulating the sense organs in the muscles, furnish the stimulus for the next act in the series. Something of the same sort occurs when one recites a poem. The words that are spoken are organically contractions of the muscles of the tongue, mouth, throat and chest. Speaking one word or syllable, therefore, stimulating the sense organs in these muscles, initiates the response of speaking the next word or syllable.

A chain of ideas or thinkings is of much the same type. In fact, the reciting of a well learned poem is really a mechanical thinking of the words, which are thought by the saying of them. In thinking through the poem silently, actual speech movements of a slight extent are indeed usually made; but as has been explained above, this process, when made very habitual, may proceed finally without the vocalization. It is possible to learn a series of familiar words, i.e., to associate

them together without vocalizing them at all; but this is possible only because each of the words has previously been actually spoken, with full muscular response, many times. Nothing but the muscles and their sense organs, or substitute mechanisms trained by these previously, could possibly furnish the basis for association.

In these explanations we have somewhat drastically simplified the situations in order to make the basic features clear. In almost all cases other stimulations than those from the sense organs in the muscles are at work throughout the series. In throwing the ball, the pitcher is visually stimulated by the batter, the catcher and other players; and this visual stimulation participates in the production of the whole process. A change in the position or movements of any of these players may change the process of throwing from then on. Another illustration may be drawn from the process of starting an automobile when the engine is already running. One after another the gear is set, the brake pedal released and the accelerator pressed. The novice does these as individual acts, but eventually they become parts of a single process, which, nevertheless, however well mechanized, is always subject to change and is in fact directed by the visual stimulations from the traffic light, other cars and pedestrians. In addition to these external stimulatory factors and the internal stimulations from the muscles, feelings and desires participate in the process, in overt series of actions as well as in trains of thought.

Thinking, when we seek to understand it on this scientific basis, is no more mysterious than the processes of walking, talking or skilled use of the hands. In fact, these performances and thinking are complicated processes of exactly the same kind, there being no actual dividing line between thinking and doing. There are many interesting features of both yet to be explained, but psychology holds the key to the problems and is gradually solving them.

The term "feeling" is one that has many meanings, and the older psychology did much to increase the confusion of the term. Today, however, psychological usage is in agreement with most prevalent popular usage of the term, although popular usage is by no means wholly consistent. In general we use the terms "feeling" and "emotion" interchangeably as synonyms; but we do tend to prefer "feeling" for the simpler processes, "emotion" for the more complex. The occurrence of feelings and the nature of feelings have been until recently a dark mystery, and little that was written about feeling and emotion before the 20th century is important, except historically. Shortly before the beginning of this century, however, the work of William James and Lange, based on Darwin's observations, introduced a fresh point of view into the field and made it possible later to bring feelings into the same response scheme with perception and thinking, dispelling the mystery.

It had long been known, of course, that feelings are intimately associated with bodily functions, especially the functions of the viscera. The gooseflesh in the skin, the trembling and rigidity, or in some cases relaxation, of the muscles of the trunk and limbs, changes in the intestinal and glandular secretions in fear and anger—these are familiar instances. The disturbances of digestion in melancholy and grief are equally familiar, and the modifications of bodily attitude, facial expression, breathing and heartbeat in emotions in general are readily recognized. These bodily changes, however, were formerly supposed to be effects following the emotions, and the nature of the feeling itself seemed remote from the body — in some mystic "psychic" realm.

THE ANALYSES of James and Lange, however, led to the conclusion that these so-called "expressions" of emotion are not really *effects* of *emotion* but are either causes of emotion or else are actually the emotions themselves. James inclined to the former view, Lange to the latter, which has gradually predominated. What we now see is that the "feeling" or the "emotion," as an objective fact, is a condition or a change in the tissues of the body or is a group of such conditions or changes. In other words, an emotion, abstractly considered, is physiological fact. What we mean by "having" an emotion, such as anger, or by "being angry," is therefore more accurately expressed as "being conscious of anger," and the anger itself is a condition or activity of the body. The same is true for any other emotion, *mutatis mutandis* [necessary changes have been made]. We are conscious of our emotions in exactly the same way as that in which we are conscious of trees, dogs and other external objects and occurrences, namely, by responses initiated by sensory nerve endings. We might well say that "having" a feeling is perceiving it, except that the word "perceive" is so well fixed as applying to external objects that it is confusing to extend its application. We can better cling to another popular mode of speech and use the verb "to feel" as equivalent to being conscious of an emotion, still using the noun "feeling" for the emotion which is felt.

The sensory nerve endings which initiate feeling responses are distributed through the body very generally. Stomach, intestines, sex organs, urinary organs, arteries and membranes lining the bodily cavities are provided with them. But the sensory terminals in the muscles and skin are also involved. Thus the intimate relations of feeling to perceiving are as clearly indicated as the relations of perceiving to thinking.

There are of course objections to this modern conception of feeling and emotion which occur to the one who considers it for the first time. These obvious objections, however, have been fully met by James and other writers, and the advance of experimental work on emotional response made, of what was at first a theory, a basic part of psychology. In another generation it will have become so commonplace that any other view will seem odd. Now, as to the difference in the usages of the two terms "feeling" (noun) and "emotion": Hunger and thirst, we always call "feelings," never "emotions." These are relatively simple bodily conditions, one in the stomach, the other in the lining of the throat and the back part of the mouth. Fatigue is also always called a "feeling," and it apparently also is a relatively simple condition in the muscles, due perhaps to an excess of lactic acid. Fear, on the other hand, is called "emotion" and is not only complex, involving conditions in many organs, but is also quite variable. Even the same person has at different times quite different types of fear.

Similar statements apply to rage, joy, grief and other states which we commonly dignify with the name "emotion" (although we also call them "feelings"). We may sometimes arrive at the use of the term "feeling" (noun) exclusively for

simple or elementary states and be able to analyze the emotions into complexes of these simple feelings. At any rate, we now know that what we conventionally call "emotions" are not unitary states of the body, nor are states called by the same name always alike. They are merely names we apply to wide ranges of feeling-complexes that occur under similar environmental conditions. Some states which we call "fear," for example, differ from one another more than do some of them from other states which we call "anger" and still others which we call "grief." In the past, psychologists have sought for a small group of fundamental emotions, always the same, of which all the others might be considered compounds or mixtures. We now know that this search was a mistaken one. None of the complex states we call "emotions" is either fundamental or uniform.

CLOSELY CONNECTED with feeling are the *desires;* but our knowledge of the nature of desire is still incomplete. In any desire, properly so-called, a thinking process is involved. You cannot desire without desiring *something*, and to desire something you must think of it—and think of it in the anticipatory way. Apparently, then, the desire is a certain anticipation combined with a certain feeling. For example, the desire of food is hunger, combined with either the thought of food or the thought of eating. The desire of drink is thirst, combined with the thought of liquids of certain sorts or the thought of drinking. A number of other definite types of desires lend themeselves to this simple explanation. However, there are a vast number of desires which cannot be so easily explained. The present tendency is to suppose that there is a limited number of primary desires, each based on a feeling resident in a certain bodily organ or tissue and each having reference to a primary need of human life. From these vital desires, the great mass of secondary and variable desires is derived. We are not yet in position to make this conception a permanent part of psychology, although the increasing weight of evidence is driving us in that direction.

It is evident that the topic of desire is one of the central topics in psychology, as desire is central in human life. Human activities and human thinking are controlled and directed by desires. The efforts to satisfy desire are the basis of social relations, economics, law, ethics and religion. No part of the psychological field is in more urgent need of cultivation by research than is the field of desires.

WE HAVE EMPHASIZED the fact that perceiving and thinking are developed by *learning.* We might also have emphasized the part that learning plays in our emotional life. Learning is not merely one of the central features of life; it is the feature which makes life possible.

"Learning" and "habit formation" are synonymous terms. When we learn anything, we are forming a habit, and what is learned is a habit formed. If I learn to shoot an arrow into the bull's-eye of a target, I am forming a habit of making certain movements of hand, arm and body in relation to the bow, arrow and target. If I learn a poem, I am forming the habit of stringing certain words together in a certain order. Learning to perceive accurately is forming habits of response in certain situations. Conversely, the habit of walking is something one has learned, and so is the habit of stammering.

The process of learning, or the formation of habits, is accordingly one of the principal studies of psychology, and more has been accomplished in this field than in any other. The practical consequences of these studies are obvious. What we discover about the laws of learning, the efficient ways of learning and the means of retaining what we learn is of great value in schools and in life in general.

Learning proceeds by practice, i.e., by doing, although it does not proceed by doing alone. If you want to learn a certain response, you must practice that response. If you want to learn to play billiards, you must practice billiards. If you want to learn a poem, you must repeat the poem. You must make the responses.

PRACTICE OR REPETITION is not, however, the most important factor in learning. Ideas or thinking about the habit you are to form, that which you are to learn, are even more important. Learning may perhaps proceed mechanically to a certain extent (we are not positive about that), but, in general, you do not learn efficiently unless you have the idea of what it is that you are trying to learn, and the perceptions of your progress and your errors are also a great help. Furthermore, the desire to be able to do that toward which your learning is directed is an important factor. Consider diving as an example. One does not learn to dive by merely falling into the water. One learns to dive through thinking of the nature of a dive; of the way one should enter the water; of the type of action of the arms, legs and trunk which will conduce to entering the water in that way; and one desires to be able to dive properly. Under these conditions, practice becomes effective, and the further noting of errors and their probable causes makes it more effective.

Practice or repetition may also be employed to unlearn—to break habits. One deliberately makes errors; one practices the performance which one wishes *not* to learn or wishes to *un*learn, and if the conditions of thinking and desire are right, one thus breaks up a habit.

Beyond this point, there is an importance in the way in which practice is applied. A vast amount of experimental work has been done on human beings and on rats and other animals in order to determine the conditions under which practice on two different learning tasks on the same day (or the same hour) reduces the efficiency of learning both. Many researches have been conducted on the question of which sorts of learning should be done piecemeal and how, and which are done in wholes. Should one, for example, study a geography lesson as a whole, or should one rather learn it paragraph by paragraph? Researches on the distribution of time have also been conducted on humans and animals. In a long learning task, does one save time or energy by practicing an hour every day, or an hour every other day or a half-hour every day? The question of reward and punishment has received much experimental attention. Do rewards for successful performance produce more efficient learning than does punishment for failure?

The foregoing are but samples of the problems which are experimentally attacked. None of them can be solved in a

simple way. The method of learning which is most efficient varies according to many conditions, and the ferreting out of these conditions is an important part of the work on the problems. As experimental work proceeds, problems become more numerous, and practical applications of results become clearer. There is need of the labor of many persons for many years in the field of habit, but the results already obtained are surprisingly rich.

The physiological basis of habit formation is, of course, the response. Habit is the constancy with which a certain stimulation pattern will produce a certain response. If the situation produces one response at one time, another response at another time, there is no habit.

It is obvious, therefore, that through practice or repetition of response under appropriate conditions, one of two things may be accomplished. The response may be fixed, so that it more certainly repeats when the stimulus recurs. If one causes a child to fold up its napkin at each meal, the response becomes habitual, i.e., the situation of preparing to leave the table with increasing certainty causes the child to perform the act of folding the napkin. On the other hand, one begins to throw darts at a target with little accuracy. The first responses distribute the darts over the whole area surrounding the target. Continued practice under the same stimulatory conditions does not fix these responses but gradually modifies them into a better type which places all the darts near the bull's-eye.

These facts and the slight knowledge we possess of the actual working of the nervous system make it impossible to construct even a plausible theory of the way in which the learning process occurs, so far as the nerve cells are concerned. We know that learning must be dependent on changes in the nervous system, but we have not much evidence as to what these changes are. It is true that interesting theories were constructed when our knowledge of the facts of learning was less extensive, but, with increasing knowledge, these theories have ceased to interest us. We concentrate our efforts therefore on the acquisition of more facts about learning, believing that, only after knowledge of this kind has been further elaborated and much increased, will it be possible to theorize usefully about the changes which occur in the nervous system as learning proceeds.

General psychology covers the broad field of life in all its animal forms, but for convenience in research and discussion we divide this field into several lesser fields, and we divide it in different ways for different purposes.

NORMAL PSYCHOLOGY includes the study of mental processes which occur so generally that we call them "normal," meaning that they are the usual type and practically satisfactory in the usual situations in which man exists. *Abnormal psychology* covers those processes which are not the usual ones, which are unsatisfactory in their practical relations to the environment or which lead to unsatisfactory results. One thinks of course, in this connection, of the mental processes of the insane, which are clearly abnormal. This is, however, not the most important part of the field. The most troublesome abnormal processes are those of persons who are perfectly sane – but whose methods of thinking are faulty or whose emotional processes are upset and who therefore cannot adjust themselves to the social and economic requirements of their environments. Then there are the persons who are defective in intelligence, whom in the worst cases we call "feeble-minded" and in the less serious cases, "dull" or "retarded."

Psychology has a great deal to contribute to the adjusting of abnormal living and finds many applications in straightening out the lives of those who are troubled by abnormal emotional or thinking processes. Practical work in this field depends, however, not merely on the study of the abnormal cases but primarily on the full understanding of normal psychology, so that with every advance in scientific knowledge of psychology greater contributions can be made to the relief of abnormal conditions.

With different stages of growth and mental development, the psychological processes are different, and each stage of life needs intensive study. Hence, in addition to *adult psychology*, we have the *psychology of infancy*, covering the period from birth to the beginning of speech; *child psychology*, covering the period from speech to the first stirrings of the sex life; and the *psychology of adolescence*, covering the period during which the sex life becomes fully established. The declining period of life introduces new phases, and the *psychology of senility*, although so far little studied, will shortly become a definite part of the field.

GENERAL PSYCHOLOGY, covering all of these fields is, as the name implies, primarily interested in the discovery of laws and principles of mental activity which apply broadly to large numbers of individuals. It is apparent, however, that even within a limited group individuals differ from one another in their mental processes, and the intensive study of these differences contributes much to our total understanding of the subject. This is called "individual psychology." Further, we have *social psychology*, which is the study of the group or social life of men and animals and of the particular features of mental processes which contribute especially to the formation and maintenance of social institutions.

Another manner of division of the field is into *pure psychology* and *applied psychology*. Pure psychology is interested in the discovery of facts as facts. Applied psychology is directed toward the use of these facts in improving life. The applications to abnormal conditions of mind, in alleviating these conditions, is only one of these directions. *Educational psychology* is another, and *commercial psychology*, the psychology of business and industry, is still another. Increasing success has been found in all of these directions.

When psychology was mainly a division of speculative philosophy, attempts to relate psychology to the bodily organism were known as *physiological psychology*, but this term has now little meaning and is falling into disuse. All psychology today has reference to the physiology and biology of the organism, but it does not go with the older physiological psychology to the extreme of substituting the study of physiology for the study of psychology. "Experimental psychology" is another term which has not the older meaning, since psychology as a whole is rapidly becoming experimental.

If we were to formulate a *first law of psychology*, it would be this: In any given response one is never conscious of

that response or of its results, but if conscious, is conscious of something else. For example, in perceiving a fly crawling on the arm, the perceiving response may be the putting out of the other hand to brush the fly off. But in this response, one perceives not the arm movement but the fly. To perceive the arm movement, a second response is required, this second response being initiated by the contractions of the arm muscles which occur in the first response or perhaps by the visual stimulation of the retina of the eye by the hand movement. It should be noted also that, while one may perceive muscular contraction, one never, in any circumstances, perceives or is conscious of what happens in the nervous system.

The *second law of psychology* would be as follows: In any given response, as defined by the physiological occurrences in sense organs, nerve tissues and muscles, one may be conscious of any one of a wide range of things, according as learning or habit formation has built up the conscious factor in the process. Thus, a certain stimulus may cause the speaking of the word "motorcar" in a child or in an adult. But what the child perceives in that response is vastly different from what the adult perceives. Again, a certain response initiated by a muscle contraction may include the *perception* of the muscle contraction which stimulates the response; or it may include the *thinking* of something quite different.

The *third law of psychology* would be: In responding to any stimulus we may be *more or less* conscious of this, that or the other feature of the total object of consciousness at the moment. For example: While I engage in correcting the draft of a letter, the wind blows a paper across my desk. I respond, and respond consciously, to the stimulus of the moving paper; but I am not so conscious of it as I am of the letter. Popularly, we describe these differences in consciousness as differences in attention. I perceive a total object, some features of which I attend to strongly; other features I am less attentive to, and some I hardly attend to at all.

The neurological conditions of these differing degrees of consciousness are characterized under the term *integration*, as described above. The fact is that consciousness varies, when we consider it in relation to what we are conscious of, from a high degree down to a low degree, at which low degree, however, we are still conscious. In abstract discussion, low degrees of consciousness are called "subconsciousness" and offer no special difficulties to our psychological research.

Another term which has lately crept into popular usage is the word "unconscious," and this is a different matter. The term "unconscious" has a certain use in psychology – as describing conditions in which one is *not conscious*. If we revert to the fundamental meaning of the term "conscious," we see that a person is unconscious when he neither perceives, thinks nor feels. If, in a given case, we conclude that a person under examination is still sensitive to touch or pressure, or to sound, we say that he is still conscious. If he has any feelings, although perception be entirely absent, he is still conscious. If it were possible for him to think, however vaguely, though he might not perceive or feel, we would still describe him as conscious. He is *unconscious* only when no mental process is occurring. In scientific psychology, we use the term "unconscious" in no other meaning than the one described, since any other use would be profoundly inconsistent and confusing. ◆

The Study of HUMAN NATURE

by John F. Dashiell

SURELY WE SHALL ALL AGREE that we find ourselves and our fellow men and women the most engrossing and fascinating things on earth. Listen in on conversations, scan the columns of your morning paper, analyze motion pictures and radio and television programs, and you will find that in nearly all instances the focal concern is people, their foibles and frailties, their virtues and valors. There is a universal interest in persons, and "the proper study of mankind is man."

Knowledge and understanding of human nature may be acquired in various ways. One is the direct way of everyday practical experience. The preschool child embarks upon this road as he comes into contact with playmates and must respond appropriately to their presence. And throughout life the daily contact with one's fellows furnishes the opportunity – even necessity – to learn better how to get on with them: when to approach and when to avoid.

Another avenue of approach to human nature is the indirect route through literature and other fine arts and through history and biography. By these means human beings are observed at second or third hand, and, though they lack the concreteness of those encountered in the flesh, a correct understanding of them is presumably furthered by the interpretations of the artist or writer. . . .

The most direct and definite route to a knowledge of man is that furnished by the methods of natural science, namely, observation and experimentation with statistical refinements. Historically, in the development of Western culture, scientific methods came to be recognized as a kit of intellectual tools invaluable for getting at the facts, and man came to realize the distinct advantage of addressing nature in a detached and impersonal manner – and so with regard to man himself. Putting aside our prides and prejudices, what facts can we discover about him? From this emphasis upon the application of scientific methods to the actions of man, modern psychology was born.

The reader should not become confused. Not just any

opinion or information about man and his behavior is "psychology," even though it may claim to be such in newspaper advertisements and pulp magazines, and not everyone who knows his fellow man usefully and adequately is a "psychologist." To call an effective salesman "a good psychologist," or a rabble-rousing political speech "good psychology," is as loose language as to call a successful farmer a good botanist or a trainer for a dog-and-pony show a good zoologist. Properly speaking, then, the term "psychology" is limited to those interests in human behavior that take the form of true scientific inquiry.

Let the idealistic reader not be disturbed. Let him not fear that scientific study is inimical to the values of life — to whatsoever things are true, pure, lovely and of good repute. Quite the contrary. The study of humankind as an objective thing does not challenge any of the goods of life; it helps us to secure them. And we can properly invert the problem raised by a recent thinker, "the place of values in a world of facts," and inquire rather as to "the place of facts in a world of values." Natural scientific values are instrumental: By knowing more we can provide and maintain those objects and situations in which we have enjoyment of beauty or perpetuation of friendship or addition of comfort. Modern psychology looks to scientific methods to establish the facts of human behavior, but it recognizes the happiness of men as an ultimate ideal. ◆

MODERN PSYCHOLOGICAL THEORY

by Floyd L. Ruch

As man's knowledge of himself progressed, psychologists began to develop certain fundamental generalizations. These eventually crystallized into definite ways of regarding man, which in turn suggested particular methods of study. Sometimes, however, the methods suggested the fundamental generalizations. Out of this interplay of methods and principles rose definite points of view (or "schools") which, in turn, came to be fairly distinct from one another in three ways: (1) in the problems studied; (2) in the method of study; and (3) in the theories developed.

The formation of the first school of psychologists, the structuralists, marked the establishment of psychology as a separate science. Structuralism was developed in Germany about 1879 by Wilhelm Wundt and his followers, who were influenced by the doctrines of experimental psychology on the one side and philosophy on the other. Later, this school of psychology became established in the United States by E. B. Titchener, a former student of Wundt. Unconcerned with the analysis of overt behavior, the structuralists maintained that psychology was the study of conscious experience. They held that elementary mental states, such as sensations, images and feelings, formed the structure of consciousness and were directly observable through introspection.

The name "structuralist" came from their claim that complex experiences were constructed from these mental elements, much as a chemical compound is constructed from the basic chemical elements. Employing introspection rather than objective observation, they applied the experimental method to the study of sensation. They sought to discover the *physiological* bases of various types of conscious experience but, lacking present-day techniques for exploring deeply the mechanisms of the nervous system, they relied on introspection rather than objective observation for their basic data. They did, however, define a problem rigorously and then set about investigating it through careful empirical observation. Through their efforts, psychology secured its independence as a branch of knowledge separate from physiology and philosophy. Inasmuch as they were not satisfied with studying only the mental elements revealed through introspection, American psychologists began to break away from the structuralists about 1900 to form a new school which became known as "functionalism." Led by John Dewey, the functionalists regarded psychology as the study of man's adjustment to his environment, of the instruments he has evolved to aid him in adjustment and of the ways in which he can improve his adjustment through learning.

The functionalists, like the structuralists who came before them and the behaviorists who came later, thought of behavior and consciousness as composed of elements. For the structuralists, these elements were mental states; for the functionalists, they were both mental states and stimulus-response acts which had value in adjustment. Because of their emphasis on behavior and adjustment, the functionalists extended the scope of psychology to new fields which had been ignored by the structuralists and thereby established the basis of modern applied psychology, especially in the fields of educational and clinical psychology.

Around the turn of the century, at about the same time that functionalism began to thrive in America, the school of psychoanalysis came into existence in Europe under the leadership of Sigmund Freud. The emphasis of psychoanalysis is the *unconscious mental processes*. Freud held, as do his followers, that the great driving forces of humanity are unconscious systems of ideas or cravings of a "sexual" nature. Freud used the term "sex" broadly to include any craving for pleasure. According to this school, these wishes or urges are usually not felt directly in the consciousness, although from earliest childhood they influence behavior in numerous indirect ways, unknown to the individual.

Psychoanalysis started as a means of discovering the cause and cure of the personality defects which arise from these unconscious drives. As therapy, it employs a set of techniques

for making the patient bring the unconscious part of his personality into consciousness and learn to control its workings. It was later expanded from mere therapy to the explanation of cultural phenomena but still remains decidedly limited as a school of psychology. There are many traditional problems in psychology about which it has little to say, such as the nature of the learning process and the organization of human abilities. Moreover, it relies entirely on the clinical method, neglecting the experimental verification of its theories. The major contributions of psychoanalysis have been to the study of abnormal behavior and personality development, and its theories have profoundly influenced modern child psychology.

BY THE END of the first decade of the 20th century, introspection had become a traditional method in American psychology. The structuralists had considered introspection to be the only proper research method, and the functionalists were continuing to rely upon the method extensively. The behaviorists, however, who appeared next on the scene, were convinced that the introspective method has insurmountable limitations for revealing the nature of man. They were certain that consciousness could not be accurately studied at all and decided to discard it entirely from their scientific work. Some of them even denied the existence of consciousness merely because one person cannot observe it in another. Instead, they turned to man's overt behavior, which they studied through the objective method.

Theirs was a psychology based on stimulus-response connections, which they believed were established through a process much like the "association of ideas" first suggested by Aristotle and ultimately developed by the British philosophers of the 17th, 18th and 19th centuries.

The basic concept of the behaviorists was that behavior grows more complex through this process of forming new connections between stimuli and responses originally unrelated. Thus, in viewing man's behavior as made up of discrete, independent stimulus-response units, behaviorism, like structuralism and functionalism, was atomistic.

The behaviorists attracted considerable attention in the United States during the period immediately following World War I, under the leadership of E. L. Thorndike, John B. Watson, W. S. Hunter, J. F. Dashiell and others. In addition to their numerous contributions in the field of learning, the behaviorists strongly influenced American psychological thought through their development of special research methods (particularly with animals) and their stress upon objectivity in research. Most psychologists, however, felt that conscious and unconscious experience should not be neglected by psychology, no matter how difficult the study might be.

THE WORD "*Gestalt*," brought directly into English from the German, means "pattern" or "configuration" and indicates the emphasis that the Gestaltists place on the *whole pattern of behavior or experience* rather than analysis of it into elements. The fundamental principle of Gestalt psychology is that the whole of experience or behavior is more than the sum of its parts, and thus a change in any element changes the whole, just as the change of a single note in a tune produces a slightly different melody. The Gestalt school grew up as a well motivated protest against the assumption of the structuralists, functionalists and behaviorists that mind or behavior can be viewed as constructed of single elements.

They maintained instead that, just as a house is more than a pile of bricks (having qualities like architectural style, proportion and "invitingness," not reducible to qualities in the bricks), so is an act more than a group of reflexes and a conscious experience more than a group of elementary sensations, feelings and images. The Gestalt school has also derived many of its principles from the laws of physics, especially those concerning fields of force, which are believed to be more applicable to psychological events than the concept of connections between independent elements. Even the elements, as they point out, take their character in large part from the whole.

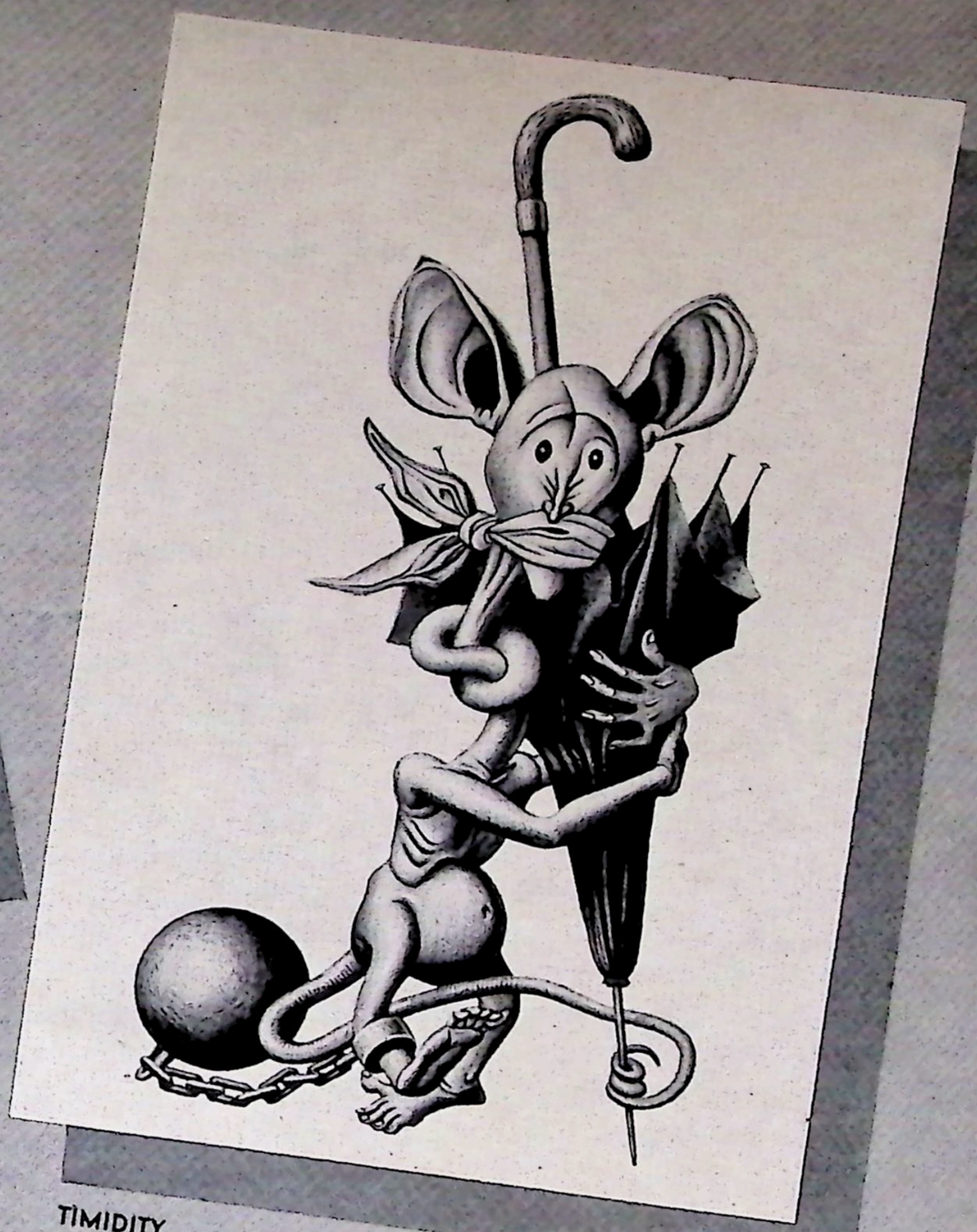
This school was founded by Max Wertheimer and is best known in the United States through the later teachings of Köhler, Koffka and Lewin (all were exiles from Germany). Gestalt experimenters use introspection as well as the objective methods of the behaviorists. Gestalt psychology has contributed extensively to our understanding of illusions and other problems of perception, and its principles have greatly influenced modern education and clinical psychology.

The greatest influence of the Gestalt school on education and clinical psychology is seen in the emphasis on the principle that a person is a whole person. The teacher who applies this principle is aware that a child's emotional tensions at home or his need to be accepted by his classmates may strongly affect his ability to learn arithmetic. The psychiatrist or clinical psychologist following this principle realizes that he cannot expect to be successful if he merely treats single symptoms but must work with the whole person.

The accompanying chart organizes the facts about the chief schools of psychology. Each of these principal schools has made important contributions to the development of the science of psychology and has left its mark on modern thought and theory. Few contemporary psychologists adhere wholeheartedly to one or another of these divisions. Psychology today is characterized by a broadened viewpoint which accepts each school for what it has to offer in achieving the fundamental aim of psychology – the understanding of man or some aspect of his behavior or experience.

ALTHOUGH the different schools have at times been regarded as hostile camps which have tended to retard the progress of psychology by "interdenominational" quarreling, they have now come to be recognized in a more constructive light as convenient theories to guide the study of man. The theoretical orientation of a psychologist depends largely upon the field of study in which he is engaged. The clinical psychologist, for instance, would probably find psychoanalytical theory more valuable in his work than structuralist theory, while the animal psychologist would be more influenced by behaviorism. Educators have borrowed heavily from the concepts of the functionalists and the Gestaltists. ◆

INDECISION



TIMIDITY

ANXIETY

HUMAN BEHAVIOR and PERSONALITY

What Makes People Act That Way

by Barney Katz and Louis P. Thorpe

MOST OF THE PEOPLE of this world are in distress; this distress ranges from mild annoyances to unbearable agony, from momentary sorrow to lifelong suffering. It touches some lightly, others heavily. But more thousands, more millions, become gravely distressed each year in our times. Ours is the age of world wars and personal anguish. At the same time, it is the age of greatest advance in scientific knowledge, when more tools and techniques to benefit mankind have been put in our hands than ever before. We need only to learn how to use them to free ourselves of much of the distress we suffer.

If we are to cope with our distress, we must know its causes, find its sources. Some is thrust upon us by the world around us, by seemingly implacable forces over which we have no sure control. War and the threat of war, the burden of taxes, crowded subways and buses, rain on summer weekends – these and hundreds of other environmental influences cause distress.

Accident and illness also bring pain and suffering, worry and sorrow. We can exercise reasonable care against accident and go to the doctor when ill, but we know that a certain measure of such distress is unavoidable.

Finally, we are distressed by our feelings – some inexplicable and some not. We feel depressed or dispirited, worried or discouraged – often over nothing discernible or trivial events.

These three sources of distress are not really distinct and separate, of course. Each overlaps the other two, and all involve our feelings. The war may cause a man to overwork and become ill, after which he worries – thus combining all three in one. Eventually, however, distress is determined in large measure by our emotions. How do we react to war, taxes, crowds and misfortunes? How do we handle sickness or accidents? Do we weep, run away, lose our tempers, hide, let the other fellow take care of it, view through rose-colored glasses – or do we face the facts, take what action we can and go on to the next job or pleasure?

A man's mental and emotional reactions to people and events – and to himself – largely decide how distressed he is. The loss of a loved one brings emotional pain to everyone, but one person overcomes his sorrow and carries on while another loses all spirit and hope. The difference lies not in the event but in the emotional reactions felt by two different persons.

In looking for the source of distress, then, let us look primarily into the emotions. We cannot keep death from taking someone close to us. We cannot, single-handed, prevent war or reduce taxes. But we *can* do something about our emotions.

Many believe that precisely the opposite is true. They think that they can do something about forces outside themselves but nothing about their inner feelings. "You can't change human nature," they say, or "I can't help the way I feel – I'm just made like that." The truth is that you *can* change your nature. You do *not* need to be like that. Science has learned much about the mind and emotions, and the most encouraging fact is that they can be retrained, retaught, redirected into a new, healthier and more rewarding course. In cases of serious trouble, professional aid may be required, but an understanding of the way emotions work can help you to understand the distress of your neighbor, your boss, your spouse, your children – and yourself.

In speaking of people in distress, we are not restricting ourselves to those who are so ill mentally that they must be confined to institutions, although their number is steadily increasing in this country. Actually, on any one day more people are confined in public hospitals and private sanitariums for treatment of serious personality disorders than enter colleges and universities each year as freshmen.

Another group obviously in distress is that receiving regular psychiatric or psychological treatment from private practitioners or clinics – plus the added thousands who should be receiving such treatment. Theirs is a story of the uncertainty, difficulty and defeat which each year overtake tens of thousands of citizens. They may not require institutional care, but they live in a kind of twilight zone, never quite successful and rarely entirely unsuccessful, buffeted about by forces they do not understand and with which they cannot cope.

Finally, some people in distress seem to be, on the surface, reasonably successful, moderately happy. But a closer acquaintance reveals hidden burdens of sorrow or fear or uncertainty, or perhaps minor peculiarities that label a person slightly eccentric. Here we find the woman who is effacingly shy, the man who is often noisily bellicose, the woman-hater and man-hater, the devotee of nine pet cats, the stutterer, the person with the facial tic, the sufferer from migraine headaches, asthma or numerous other emotionally produced bodily ills.

Such people are all around us – in school, at work, at home and among our friends. Many are intelligent, warmhearted, capable and successful in material ways. But they all suffer some distress, and that distress limits to an extent their achievements – cripples in some manner their personalities – depending upon its nature and its gravity.

Every elementary school has its problem children – youngsters who are shy, sensitive, rebellious, antisocial or truant. Most high schools have a substantial number of students who are unmanageable, unsociable, depressed or anxious, or who suffer from physical symptoms arising from emotional troubles. Every college campus has its quota of maladjusted personalities, from the seclusive and fearful individuals to the hostile and overbearing, from the chronically sick girl to the heavy-drinking boy – or vice versa.

You will find signs of distress among people on any job: the man at the next machine, the secretary, the clerk, the truck driver – and the managers and bosses themselves. Investigations of dismissals from jobs indicate that more than three-quarters of those discharged are labeled unsatisfactory

because of irritating or efficiency-destroying personality traits, ranging from dishonesty to procrastination, suspiciousness, bullying fellow workers, fomenting discontent, and delusions of persecution.

What makes people act that way? They certainly don't like the idea of being shy, troublesome, ailing, fearful, uncertain. Nobody consciously chooses stuttering, losing temper, nightmares, picking fights, feeling picked on or regular lying as a way of life. Still, almost everyone has some handicapping trait or emotion that retards his success, spoils his social relationships or at least makes many hours of his own life miserable.

If you ask most people why they do or feel these things, they say that they cannot help it, that they are just made that way. By this, some mean that in their opinion problems of emotion are beyond their control, that certain circumstances produce in them fixed reactions about which they can do nothing except try to change the outside circumstances — and that is rarely possible. Others mean that they have inherited a kind of taint — or a tendency to be this way or feel that way. "My grandfather had a terrible temper just like mine," one man says, and feels that therefore he cannot help continuing to lose his temper often. "I inherited my mother's fear of the dark," a woman explains, thus excusing herself from any effort to get over this unreasonable terror. Uncle Harry drank himself out of every job and into his grave, so Nephew Tom is doing the same thing, and not only Tom but even all his friends and family blame it on his unfortunate inheritance.

Actually, only one mental disorder, called Huntington's chorea, has been definitely accepted by scientists as hereditary. There is some inconclusive evidence that hereditary factors may tend to predispose to epilepsy, provided only that certain environmental influences develop. Beyond this, most authorities agree that heredity does *not* play a significant role in emotional and mental disorders, either major or minor. No person is born to be a stutterer or to lose his temper or to be a bully. No baby is born timid and uncertain, or selfish or suspicious. He contains within himself no taint that will later lead to his drinking heavily or becoming a criminal. These things — and almost all other "peculiar" traits, as well as the most serious mental disorders — are acquired, learned in the process of growing up. The "learning" may not be conscious, as the learning of the alphabet and the multiplication table are the result of conscious effort, but they are learned by the mind and emotions in subtler ways. And, since they are learned, acquired, they can therefore be unlearned, can be disposed of. The bugaboo of a fixed and unalterable inheritance has been shattered in the past 50 or 60 years by modern scientists investigating the workings of the human mind. No more hopeful and encouraging discovery has ever been made.

"Well," you may ask, "if heredity doesn't cause me to act as I do, what does?" People act the way they do because of their efforts to obtain basic satisfactions. They cannot go on living and functioning as human beings without getting an essential minimum of these needs, and their bodies and minds know this. They are compelled, consciously or unconsciously, to search ceaselessly for satisfaction of these organic and psychological needs — nourishment for the emotional as well as the physical man.

How can selfishness, timidity, temper tantrums and other personality handicaps serve as methods of achieving these basic satisfactions? They are not good methods, of course, any more than a child's bad behavior is a desirable way for him to get attention, but they are all too common. At best they are poor substitutes for the natural ways to obtain satisfaction. In the main, they are reactions which occur when the natural way is blocked. The baby who is frustrated in his efforts to obtain the satisfactions important to him cries loudly and vigorously. As he grows up, he reacts in a more subtle fashion and in a multitude of different ways. The motivation is essentially the same, however; he cannot satisfy certain needs that urgently and incessantly demand satisfaction.

Here lies the answer to the question, "What makes people act that way?" Here is the essence of what psychologists have learned in recent years about the inner workings of human beings. Once you have grasped this concept clearly and examined its many implications about man's strange behavior, you have taken the first firm step on the ladder leading to a better understanding of your friends and yourself.

THE ORGANIC NEEDS are most easily understood because we have long been trained to observe and react to material things that we can see, touch and examine closely. It is elementary to state that humans feel a basic need to maintain their physical well-being, to keep their bodies nourished, warm and healthy. We cannot live without oxygen, food and water — and everyone knows it.

Each person on earth spends a great deal of his thought and energy in obtaining the satisfaction of these physical requirements, knowing that he will cease to live if they are long denied, that he will suffer great distress if they are not satisfied fully. Hunger, fatigue, pain, excessive heat or cold, thirst, lack of air — these and similar conditions create tensions driving a man to relieve them. When these conditions are severe, men react in many different ways. Under the pressure of great hunger, pain or fatigue some men become apathetic; others grow violent and commit crimes; still others become irrational. It is universally acknowledged that, when the body's basic organic needs are not satisfied, a man may get seriously sick or may act in a fashion far from normal. Satisfy his hunger or thirst, you say, or relieve him of his pain, and he will act normally once more. (Remember this when you come to consider the other basic needs.)

The satisfaction of the basic organic needs is more complex, however, than the mere finding and eating of food when hungry. This conscious level is just one of three upon which man acts to gain his physical requirements, although it seems the most important at first glance. You consciously turn up the thermostat or shovel more coal on the fire when you are chilly, take off your jacket when hot, go to bed when you are tired and sleepy, watch your diet when you grow too plump, take pills that you feel will improve your health.

In addition to these actions of which you are fully aware, your body is constantly acting automatically to maintain your physical well-being. For example, certain healing processes go on most of the time; white corpuscles in the blood fight off a minor infection you don't even know about; your stomach muscles contract to expel a food or poison that might injure your body, and though you know about it, you cannot help it.

Unconsciously, you perform many acts to ensure your physi-

cal safety or comfort, also. You shift your body weight and grab for support when you trip coming downstairs. You throw up your arms before your face when something is thrown at you. You become alert and ready for action – either fight or flight – when you sense danger.

People are strongly impelled toward adequate satisfaction of their organic needs. They are moved to act until those needs are satisfied. This need for physical well-being is so fully recognized, indeed, that for many it has come to overshadow all other aspects of life. Some men drive themselves so hard to gather enough money for food, clothing, shelter and other physical necessities that they become ill. Others are so insistent on maintaining good health, seeing many different doctors and taking all kinds of medicines that they neglect other needs and bore their friends. Some parents seem to feel that if their children drink enough milk, take enough naps, put on or take off enough sweaters or rubbers, brush teeth often, then these parents have done their full duty and all will be well.

Such people are vaguely aware of other needs – of love, of something that impels them to seek the good opinion of others – but spend little effort in satisfying these needs. They must realize that the organic need is only one of three basic needs of a human being. And just as a man can grow sick or die from lack of satisfaction of his body's needs, so he can grow sick or die when the other basic needs are not satisfied. Just as he may commit crimes, become irrational or act in many ways that are far from normal under stress of hunger, pain or other organic demands, so may he also do these things and act in this way when his other needs are not satisfied.

THESE OTHER BASIC NEEDS are concerned with thinking and feeling, with the mind and the emotions, and the demand for their satisfaction is imperious and persistent. Look behind the actions and attitudes of the people around you, and you will find that most of them spring from the well nigh insatiable appetites of these needs. Considered as the source of distress, these needs might at first appear to be a curse upon mankind, pushing him into pain and sorrow, into eccentric or antisocial behavior, into illness, into institutions for the mentally deranged. But from a more positive point of view, they are seen to be the wellsprings of all great actions of men and women, the dynamic force behind all worth-while achievements, the sources of happiness. They are the life forces within us all, the only tools with which to build good lives for ourselves, and their power appears to be almost limitless.

How you think and how you feel are surely as important as how you drink and eat and keep physically strong. You cannot see a thought or touch an emotion as you do meat and water, but they are just as real. A vicious thought can cause pain as intense as that from a knife plunged into a vital part. A pleasant emotion can bring satisfaction as great as the fulfilling of any physical need. That is why the second basic needs of man are called the *ego needs*, the needs concerned with the *self*, or *ego*, as opposed to those concerned with the physical body.

The first of these is a need for a sense of security, for comfort and safety, achieved primarily through the love and affection of one's fellow men. Man is a social animal, capable of a full life only in relation to others. He needs warm relationships with other humans, a need most completely satisfied in the family, with its emphasis on intimate love, the rearing of children, the sharing of joys and responsibilities. Some satisfaction of this need is found in many personal contacts – with friends and associates with whom one has a continuing relationship.

To many people today, especially those who overemphasize the first basic need, "security" means a good job, money in the bank, a home, insurance, stocks and bonds, but this is not security in the sense meant here. The miserable millionaire and the happy poor man are stereotyped characters whose very triteness testifies to their widespread existence and to the general recognition that one cannot gain happiness solely by the garnering of material and physical satisfactions. The ego must be satisfied too, and without that, the maintenance of physical well-being is an empty thing – food without taste, a beautiful automobile without gasoline.

True security resides in the thoughts and feelings of individuals. A man feels secure when he feels wanted by someone else, when he knows he has a place in the minds and hearts of others. He feels secure when he is loved.

Love means different things to different persons, or different things at different times. It may mean the closest physical contact with another person. It may mean regular companionship with another. It is the feeling that exists between parents and children, between man and wife, between close friends. It may cause you to receive great pleasure from depriving yourself of something in order to help another, or it may bring intense pleasure when you receive something from another. Love has been defined in many ways and has been called incapable of definition, but it actually is a term that can be analyzed and evaluated. No matter how it varies, there are four elements to be found in love, four standards sought by everyone who loves or is beloved.

First comes *understanding*, placing oneself in the position of another person in an effort to comprehend why he thinks and feels as he does. With even partial understanding comes a desire not to hurt the other person by any act or word. A mother, for example, will understand why her 3-year-old son took some of her best silverware to play in his sandbox and will not scold or hurt him for a deed he could not be expected to see in its adult implications. She will find a satisfactory substitute and try to explain the difference. A father who tries to understand his 15-year-old daughter's desire to be grown up and like the other girls will not belittle her for putting on too much makeup. A husband who understands his wife's feelings will not criticize her for wanting to see her mother every week, even if he himself does not like his mother-in-law.

A second quality of love is *trust*, the ability to confide in another person and feel certain that nothing will be done to betray that confidence. A trustworthy individual will not hurt the one he loves. Young people in love want to tell each other their secret thoughts, plans and desires, and they must feel that these confidences will not be broken.

Cooperation is an essential element of love – willingness to give up something desirable so that another person may obtain something he wishes. A cooperative person is willing to be hurt in order to spare someone else similar feelings. In any

family, in any close relationship, there are countless acts of cooperation, small acts of thoughtfulness and consideration that mean love — the foregoing of a golf game, a tea, a bridge party, a new dress, a television program, for the sake of some activity desirable to another.

Finally, love means a display of feeling, *overt affection* — a hug, a kiss, a pat, a handclasp, a caress — actions that mean love. Few things give more pleasure than genuine demonstrations of love, and close physical contact means protection, union, companionship. There are times when a pat on the back or a pressure of the hand can give courage to a harassed man, when a quick kiss can lift the heart of a tired wife, when an arm around the shoulder can give confidence to an uncertain or frightened child, when intimate physical contact can banish the distress and trouble of the world and bring peace and security and the knowledge that one is desired and desirable. Some people feel that outward display of affection is "sentimental" and a sign of weakness. Actually, it is a sign of strength — the strength that comes from love given and received.

A person's attitude toward love, the ability to feel it satisfactorily and show it, is largely determined in childhood when that emotion is first encountered. An adult can understand, trust, cooperate and display affection if he has received love with these qualities when he was little. Parental love is the foundation upon which a sense of security develops. A child's emotional well-being depends upon the assurance that his parents care for him, want him and *accept him as he is*. He must experience continuous and unqualified acceptance if he is to feel secure and if he is to grow up with the ability to satisfy his basic needs adequately. His attitude toward the world and the people in it, his ability to avoid much distress and handle that which is inevitable, will spring from the sense of security, the love, given him by his parents. To the secure person the world is essentially a friendly and safe place, even with all its trouble and turmoil, and the people in it are friends with whom he feels at ease.

EVERYONE MUST FEEL that he is of some importance, of some value, or he will have little desire to go on living. But that is not enough. A person must feel that he is worth while in the eyes of others, that he is of some consequence to people other than himself. He strives for recognition and approval in order to satisfy a third basic need which is one of the most potent forces in life — *the drive that impels man to seek distinction, individuality and self-expression.*

As with the sense of security, the foundation for a feeling of personal worth and adequacy is established in childhood and is strengthened by three methods of parental handling in early life. *Sincere interest* in your child's thoughts, feelings and activities will prove to him that he occupies an important position in your eyes. Even noticing him in a friendly way will contribute to his self-esteem, and spending time with him regularly, on his level, will confirm it. Reading to him, playing games with him, showing him how to draw, listening to his tales of school, of friends, of his vivid imagination — all convince him of his personal worth. Parents who are too busy to spend much time with their children are telling them by their actions that the youngsters are not important. They cannot then help feeling extremely unworthy and inadequate.

For a sense of personal worth, a child must have *approval.* Without it, he cannot possibly gain the confidence or ability to meet the problems that confront him now or later in life. To a young child, his parents are the whole world, representatives of society as a whole, and what they say about him is accepted as true. Continual disapproval will cut the ground from beneath his feet. He must be approved, moreover, for what he is and not disapproved because he does not match some preconceived dream of his parents. The father who finds he has a scholar rather than a baseball player, the mother who has a budding career girl instead of a would-be housewife, should not disapprove because of any personal disappointment but should heartily approve of the real children. A parent might as well cripple his child physically as handicap him for life by withholding approval.

Overt affection plays as important a part in creating a sense of personal worth as in developing a feeling of security. When you show that you love a person, you let him know that he is of importance in another's eyes. Demonstration of love for your child helps shape his attitude toward other people in general and at the same time determines his feelings about himself. Physical contact and closeness also nourish a capacity to respond warmly to affection when he grows up.

WHEN YOU NEGLECT your need for physical well-being, the results are usually obvious. You grow thin or fat, run a fever, break your leg or grow tired easily. With these symptoms, most people take some definite steps to correct the condition. They go to a doctor, eat regularly, exercise, get more sleep, take vitamin capsules, go on a vacation, stop drinking heavily.

When people suffer from psychological malnutrition, however, they are likely to blame it on heredity, the world or human nature. They suffer from symptoms just as varied and serious as those that occur in physical conditions. These symptoms may be neurotic, psychosomatic or psychotic and may range from such mild disturbances as self-consciousness, loss of appetite and muscular aches and pains to the more moderate disturbances such as phobias, palpitations of the heart, sexual weakness and asthma, to the more serious conditions of delusions and hallucinations — complete separation from reality, which requires hospitalization in a sanitarium or public hospital.

We do not always know why one person is upset by a certain experience which fails to disturb his neighbor or why Mrs. Jones got an ulcer and Mr. Brown started beating his wife, although their distresses originated in similar events. But this ignorance is really no greater in the case of the emotions than in organic matters. Some persons can walk through an epidemic untouched, while others are laid low by the first germ. The body and the ego both contain great inner strength as well as obscure or hidden weaknesses of which we are not aware. We do know, however, that a very close relationship exists between feelings of insecurity and inadequacy and abnormal ways of behaving.

We know, too, that all human beings require a certain minimum of satisfaction of the three basic needs to attain a reasonable measure of adjustment and achievement. Needs may vary in degree from one person to the next, but these

needs are always present. Man cannot live a wholly selfish or a wholly unselfish life and remain normal emotionally. He must give some love and receive some love, must understand and be understood sometimes, must trust and be trusted, must work with and consider others. He cannot help searching for approval, for recognition, for social acceptability. When he fails to find these in the amount essential to his psychological health and integrity, he will unconsciously develop some tension symptom or abnormal behavior pattern that serves as a solution — even if a poor one — of his difficulties. By showing deep suspicion of others, he frees himself of blame. By developing amnesia he gains a certain freedom from responsibility and also attracts attention for which he may be starved. He will resort to the poorest substitutes and even the most antisocial acts in order to protect his ego and gain a sense of personal worth. If these fail, he may take his mind and feelings away from the real world into an imaginary one in which he is important and secure.

THE DRIVE behind every kind of human behavior is the effort to satisfy the three basic needs, for in the satisfaction of those needs lies happiness — the goal of each one of us. The encouraging fact revealed by modern science is that the different ways of satisfying those needs are learned. If we have learned to use the wrong ways, we can by enough effort and understanding learn to use the right ways. If we have missed happiness, we do not need to go on missing it forever.

If you cannot get food to nourish your body, you suffer distress from the frustration of a basic need. Frustration comes just as surely from inability to satisfy your psychological needs, and distress follows. These frustrations come from life situations, from society or from you yourself.

Life, of course, in the form of wars, taxes, housing shortages, fires, floods, heat, cold, rain and other tribulations, continually buffets people. A good worker may fail to get a raise because of the shortsightedness of his boss and through no fault of his own. A child may be made fun of by others just because he is short or fat or thin. All of these situations may thwart satisfaction of need for security and a sense of personal worth.

Although man is a social animal, his own society presents many frustrations. Each social group, racial or religious, has its own customs and folkways to which its members are expected to adhere. In some, a man is forbidden to marry a woman from another group. In others, he is expected to avoid dancing, card-playing or motion pictures. In still others, he is required to eat only certain types of food. But in these days most people have contacts beyond their own groups, and many may find that they want to dance, to marry an outsider or eat certain foods that taste delicious. Society (the society to which they belong and from which they gain much that is worth while) says no.

Each person himself is also full of his own taboos, his own conflicting desires, one of which must be frustrated if the other is to be expressed. Many have deep-seated feelings or attitudes that prevent their achieving what they want a great deal, even when the opportunity presents itself. Jim Jenkins, for instance, wanted to become a good dancer. There was no physical reason why he should not have done so, for he was graceful and had a good sense of rhythm. But he felt so timid and fearful, so inferior, that he rejected an opportunity to be taught by an attractive girl — because he was afraid that he would fail. Then he would be open to ridicule, and he could not stand the prospect of humiliation. His own feelings brought frustration — feelings that in turn had come as a result of earlier, basic frustrations.

Whatever the source of frustration, a person's immediate response is usually hostility, perhaps even an attack directed against the one thought responsible. The attack will be stronger as the frustration is more complete or as the need thwarted is more important. But hostility can be expressed in many ways other than hitting someone. Swearing, gossiping, stealing and murder are all expressions of hostile feelings.

Individuals with strong egos can stand a great deal more thwarting of their desires than others can. If they are only slightly affected by the many mild disappointments of everyday living, they have a high frustration tolerance — the product of a sense of security and a feeling of personal worth. But everyone feels frustration repeatedly, for life is a series of problems to be faced, jobs to be done, obstacles to be overcome.

Some of the greatest obstacles are encountered within oneself in the form of emotional or psychological conflicts. Every person finds himself divided between two opposing forces within himself. As long as he wavers, there is conflict, and when he decides between two wishes, there is some frustration. The trouble comes from the indecision, from the time of wondering and arguing with oneself. Most conflicts arise over minor details and are easily solved when a man considers the various factors in a situation, decides what to do and proceeds to act. But there are some individuals with very weak egos who torture themselves over decisions on even minor points.

CONFLICTS COME as a result of opposed desires, unpleasant alternatives and worry about past behavior. You may want to sleep late in the morning, but you still want to be at work on time. At a party, Fred Wright may want to drink a cocktail and at the same time please his mother by abstaining. Mary wants to go to the school dance, but her best boy friend has invited her to go to the movies that night. Albert Thompson likes the security of his job but wants the higher salary of a position that may not last as long.

In conflicts between unpleasant alternatives a person is caught in a dilemma. He is faced by two distasteful or threatening situations and must choose between them. A soldier, for example, may dread going into battle but be equally afraid of being labeled a coward if he doesn't. A child may wish to leave an unhappy home but be fearful of the loneliness and hardships of the world outside. A foreman may hate to report the failure of a good friend who works under him but at the same time fear trouble or dismissal if he neglects giving a full report.

A conflict over past behavior may give a person guilt feelings. If he has done something that he considers shameful or wicked, or that someone in authority has told him is evil, he may experience a sense of remorse that plagues him frequently and preys on his mind. He is said to be bothered by his conscience, by a conflict between his act and the moral

and ethical standards by which he lives. These acts are not necessarily wicked or shameful in the eyes of society. They cause distress if the person himself thinks of them in that light. For example, a World War II navigator remarked to a friend in the heat of an argument, "I hope you get it on the next mission." On the next mission, his friend's plane was hit and all the crew were killed. The navigator felt that in some way he was responsible for the death of his friend and suffered from a deep sense of guilt that handicapped him for years.

Many conflicts that cause emotional disturbance are unconscious in nature, beyond the actual awareness of the individual. They lie within that part of the mind that has been labeled "the unconscious" because it is a storehouse of repressed or forgotten experiences and desires. This is especially true of conflicts involving guilt or humiliation – above all, those threatening a person's security or sense of personal worth. These feelings are so difficult to face that we submerge them below the conscious mind (where they would serve as constant reminders of unbearable events), but even when submerged they retain a great potential force. And every conflict, whether conscious or unconscious, brings frustration, because one or two or more conflicting desires must be thwarted when a decision is made.

Frustrations and conflicts generate emotional tension, and tension is energy, stored-up energy demanding an outlet. When one realizes the life-or-death force behind the human struggle for satisfaction of basic needs, it is not hard to understand the almost terrifying energy created when these needs are denied or thwarted. No living creature battles more tenaciously for his life than man does for the sustenance of his sense of security and personal worth.

EVERY SITUATION involving a problem produces emotional tension and energy. The natural and successful way of using that energy is in the direct solution of the problem. But if for any reason the problem is not solved, the energy remains to create a disagreeable feeling – more intense according to the intensity of the frustration. Since the body strives to maintain an internal state of pleasantness, it is "driven" to overcome, or at least to get around, the frustrating situation.

The first emotional expression of this drive takes the form of fear or anger when a person's security or sense of adequacy is threatened. Energy in the form of the most readily converted food substance, sugar, is poured into the body by the liver, using its stored-up glycogen for this purpose. The heart accelerates, there is a rise in blood pressure and the circulatory system reaches maximum efficiency for pumping blood to the muscles. Digestive secretions are inhibited, and blood is redirected from the digestive system to muscles, especially of the arms and legs. The pupils dilate, permitting more light to strike the retina and thus improve vision. The coagulation period of the blood is shortened to lessen the danger of hemorrhage. Sweat glands are stimulated, because the cooling evaporation dissipates the excessive heat generated. Thus the nervous system prepares the body for fight, flight or defense, as the individual rapidly pools his energies to meet an unusually difficult or dangerous situation.

The fact that physical danger brings about these automatic responses of the body has long been recognized, but few have known that *psychological dangers bring about the same physiological changes*, the same mobilization of the body's energies, as threats of physical danger and even of death itself. A sense of security, a feeling of personal worth, are as important to a human being as life and health.

The emotional energy generated by a frustrating situation seeks an outlet. It may release itself in acts of hostility already mentioned or in many other undesirable ways – excessive smoking, swearing, complaining, fingernail-biting, temper tantrums, alcoholism or promiscuous sexual relations. Some use up emotional energy that is not too strong through such random and useless movements as pacing the floor, tapping the fingers, wringing the hands. A man may substitute emotionally charged words for aggressive action, for, as one authority has said, "We cannot actually tear the heart out of the man who stole our girl, but we can curse him."

Emotional tension can be released through socially acceptable activities such as work, sports and hobbies. In some cases, it may be held in for a short period, then released suddenly in a trivial situation. The man who suddenly blows up at dinner because his wife has not cooked the peas just as he likes them has stored up emotional energy caused by the frustration of his boss's criticism that morning.

A GOOD DEAL of the "bad" behavior of children represents unconscious methods of reducing excessive emotional tension. Thumb-sucking, nail-biting, crying, bed-wetting, stuttering, tics, grimaces, name-calling, profanity, obscenity, hitting, biting, pushing, kicking, masturbation – all are common forms of emotional release. In the past the customary method of dealing with these problems has been threats and punishment, producing more danger to security and self-esteem and thus even more frustration and emotional tension.

Children and adults may suffer from emotional tensions of which they are unaware. A woman may feel weak and prostrated or have pains in her back from causes totally unknown to her. Tension associated with fear may be disguised as bravery; the man is afraid but cannot admit it even to himself, so he tries to convince himself and others, by an outward show of courage, that he is not afraid. He gives the appearance of being extraordinarily brave – and may perform brave acts – when he is actually very much afraid.

In some persons emotional tension produces physical disorders, known as psychosomatic symptoms, among which are asthma, peptic ulcer, hypertension, migraine headaches, "heart trouble" and colitis. Understanding of this type of functional disorder is coming very slowly, and many sufferers have been told that their illnesses were imaginary. Nothing could be further from the truth. The symptoms are real, the pain and suffering, intense.

The pain and suffering may be great in any frustration, for the emotional energy generated is potent – strong enough to kill when the frustration is severe enough and adequate defenses cannot be found.

Yes, there *are* many defenses against frustration, but most of them bring distress to the persons who resort to them. Nevertheless, any defense seems better than a damaging attack on the ego – on its security and adequacy. ♦

MOTIVATION OF BEHAVIOR

by Ross Stagner and T. F. Karwoski

HUMAN BEHAVIOR is dynamic in character. Our acts result from pressing needs and impulses. The quest for food, the search for security and the pursuit of high aspirations exemplify the motivated nature of all significant human activity.

Human experience is also dynamic. Motives influence what we see, how we feel about it, the ideas we develop and the opinions we endorse. Problem solving, dreams and creative imagination are responsive to inner needs. A thorough understanding of human motivation is indispensable to a clear picture of our own and others' mental processes.

The process of energy mobilization is chemical, metabolic, physiologic, in character. It cannot be directly observed. But when a man makes a terrific effort to escape from a burning building or drives himself past the brink of exhaustion in dangerous battle, he is exemplifying the mobilization of energy to achieve a goal. On a less dramatic scale we recognize the same phenomenon in the striving of a college student for success in his studies or in the driving ambition of a businessman toward some peak of prestige, wealth and power.

Since drives cannot be directly observed but must be recognized in terms of their effects, it is important at the outset that we state clearly the criteria of motivated behavior. We look for three characteristics of any activity in deciding to what extent it is motivated:

1. *Energy:* Motivation is operative proportionately to the amount of energy output for a given situation. A man who has been without food for 24 hours will struggle more vigorously for food than one who ate an hour ago. Rats will run faster, dig through more resistant material and in various ways put forth more energy as the insistence of the inner need increases. We therefore feel justified in reversing this relationship and inferring that, if Dick works more energetically than Tom, his motivation is stronger.

2. *Persistence:* The motivated individual does not easily give up. A child who has seen some candy hidden in the room may open drawers, pull out books, look under the furniture and keep trying for a considerable time to locate the sweets. If failure is accepted promptly and effort abandoned, we infer the absence of any strong motivation.

3. *Variability:* Related to persistence is the phenomenon of variability. While the person persists in his effort to achieve some satisfaction, he does not simply repeat the same act again and again. He will try different paths to the goal. A boy who wants prestige in school may try studying; failing to get good marks, he may try athletics; failing in that, he may become a bully – still seeking the same goal but constantly varying the technique.

The experience of others cannot be directly observed, but another individual may describe his inner experiences to you. Or you may observe your own thought processes. In either event, it becomes possible to identify the phenomena of energy, persistence and variability, by self-observation, just as on the level of overt behavior.

When a strong motive is operating, our mental processes are characterized by *intensity*, or high energy level. A young man in love experiences images, thoughts and feelings about his beloved which have a compelling, controlling quality. They can be ignored or brushed aside with the greatest difficulty, if at all. The thoughts relating to a goal object tend to *persist*; i.e., they are not readily forgotten; they recur to the mind whenever opportunity presents itself. They are, in general, *variable*, in the sense that they take a variety of forms and may adapt themselves to many different contexts. Thus, a person who is very hungry may think about many kinds of food, about various methods of obtaining food, about ways of preparing it etc. The Freudian work on dreams illustrates strikingly how the same motive, the same desired goal, may be disguised in a variety of ways during successive dreams by the same individual.

While the unifying phenomenon in all forms of motivation is *energy mobilization*, it will be advantageous for us to keep our focus on the motivating factors, not on the mobilization process. After all, our human energy is of one single variety: the chemical transformation of food into energy. The basic physiology is the same whether the energy release is based on the need for food, the quest for a mate, fear of a hungry lion, ambition to become President – or some other goal-seeking tendency. We shall thus find it most valuable, in studying motivation, to concentrate our attention on *the wide variety of conditions* and circumstances which set off this vigorous response of the individual.

It seems correct to say that there are three significant varieties of motivating factors. (The exact number is a matter of disagreement; some psychologists prefer only two, or one, while others argue for a great number.)

Whether the correct number is three or six is not especially important. It will be helpful, however, to organize them into a systematic scheme:

1. *Biological Drives:* The most elementary forms of energy mobilization arise from definite biological needs of the organism. Hunger, thirst, oxygen lack, fatigue, the necessity of excretion, the wish to escape from physical pain – these suggest some conditions giving rise to motivated action.

2. *Emotions:* Such emotions as fear, anger, joy, love, hate, disgust and curiosity imply the presence of inner states leading to more or less vigorous activity. They differ from the biological drives in that they are less closely tied to physical needs and tissue conditions; they are more directly related to external situations, and are thus more flexible and variable.

3. *Values and Interests:* At a still more complex and subtle level we recognize the energizing effect of broad non-physiological tendencies which may be called *values*. An easy illustration is that of a deep religious conviction. The person who feels his religion keenly, personally, will work hard to further his church, will think often and persistently of its welfare and so on. ♦

PERSONALITY

by John J. B. Morgan

THE DICTIONARY defines "personality" as "that which distinguishes and characterizes a person." From a psychological point of view our only criterion of this vast concept — personality — is the behavior of that person. Behavior, however, must be taken in a broad sense to include every reaction that may be manifested. A failure to respond at all when an adequate stimulus has been given is just as truly a bit of behavior as a very violent response would be.

In most individuals there may be observed a tendency to exhibit somewhat similar behavior under varying conditions. From this fact we are prone to generalize and attribute to the person certain typical modes of response. We say that one person is taciturn, another emotionally volatile, another voluble, another cynical, because we may have observed the tendency of any one of these traits to exhibit itself repeatedly in that person. It follows, then, that our conception of personality is derived from the observation of certain habitual modes of expressive behavior in those we meet in life.

The observation of these habitual expressions leads us to speculate upon what may be back of them. Why is one person subject to emotional depression and another to emotional apathy? Why is one person characterized by a brazenness that would be inconceivable in another of the same intellectual ability and social status?

There is an inborn element involved in these differences, for a certain amount of original equipment is necessary for adequate human development. A dog and a child exposed to the same environment will not develop in the same manner or acquire the same outlook. However, when we confine ourselves to one species, the significant differences between the individuals of that species are dependent very largely upon individual experience. This is especially true in the human species.

We must bear in mind that two children in the same home, attending the same school, with the same teacher, do not have identical environments. There may be favoritism on the part of the parents, jealousy between the siblings and differences in social contacts outside the home. The author has worked with identical twins, one of whom was aggressive and the other submissive, or where one was subject to severe emotional depressions not found in the other.

WE STRESS THESE FACTS to indicate that our definition of personality must be a genetic one. Personality is not a static gift which persists unchanged through all the vicissitudes of life. It changes with each new experience. We are not today what we were a year ago, yesterday or even an hour ago; we shall be different an hour from now, tomorrow and next year from what we are at this moment. Certain aspects persist as habitual attitudes; others are less stable; but both stability and volatility indicate only varying degrees of persistence and change. Change permeates the entire individual.

We may study an individual and formulate an analysis of him as he appears to us now. Such an analysis is simply a cross section of the stream of development and is valuable only insofar as we recognize a personality pattern as a composite result of all that has preceded and as the foundation of what will happen when the individual meets the experiences to come.

The basic factor in this development is integration. The normal man meets each new experience, adjusts to it in some manner and is modified by it. The keynote of personality, therefore, is not permanence and stability — but unification. Some experiences may be undesirable, and we may wish that we had not encountered them, but we cannot prevent their influence upon us. As a result of such encounters we may tend to avoid a repetition of similar experiences, but the very adoption of such an attitude means that we have been modified.

IF WE ACCEPT the idea that personality is genetic in nature and that its central core is integration, we shall rid ourselves forever of the "preconceived notion that personality is a mysterious attribute, dropped from the skies without antecedents in nature. If we simply glance at the animals about us, we shall readily admit that the difference between horses and mules, between geese and ducks — their 'principle of individuation' — can be derived only from a difference of organization and of adaptation to environment, with the psychical consequences that thence result." (Ribot, *Diseases of Personality*.)

This tendency to integration can be seen in various forms and degrees in different stages of animal development.

1. *Integration without Specialization:* A unicellular organism has a wall of separation which enables it to preserve its integrity. This wall of separation resists any tendencies from the surroundings to bring about dissolution of the cell. There is no teamwork with other cells. In some forms of multicellular organisms the main tendency to integration is still of the unicellular order. This happens when all cells that compose the organism are exactly alike.

2. *Integration with Specialization:* With an increase in specialization of the component cells of an organism, the individuality becomes more marked. A hand cut from a human being dies, and the individual from whom it was severed is permanently deprived of a portion of his individuality. The significance of individuality therefore increases with specialization of function of the component parts. The human being is more than a colony of cells; he is an integration of cells.

3. *Coordination as an Element in Integration:* Complexity in the organic scale is accomplished in part by a factor other than increased specialization of function of the component cells, namely, by the fact that the same cells may be utilized at different times for different purposes. This is accomplished

through the coordinating activity of the central nervous system. Through its operation various cells may be organized into different groupings for the achievement of totally different ends.

4. *Unstable Character of Man's Coordinations:* This brings us to the most critical distinction of all. In the lower animals, some connections through the central nervous system are rigidly fixed at birth so that specific situations will call forth very definite responses. A wasp, for instance, will go through a definite life cycle, reproduce and die – with little variation. It is definitely integrated from birth, is little subject to the modifications of environment unless these be of a particularly violent nature. The human being has a vastly more complex nervous system, with relatively fewer well established connections. He has infinitely greater possibilities of variation in response and at the same time much more opportunity for lack of definite integration. Man must depend upon experience to integrate his various elements, whereas a wasp depends upon his innate organization. This should make clear to us why man's environment is so important a part in the development of his personality. The essential similarity in newborn humans is their plasticity, their ability to be molded by training. The similarity of our environment makes us as nearly alike as we are. This does not, of course, mean that a baby can be changed into a cat through environmental influences. His basic organism is just as fixed as that of the cat or the wasp, but in the more intricate functions of his nervous organization he is very unstably organized at birth.

WHAT IS THE driving force which makes an organism tend to maintain its individuality? We urge our readers not to follow implicitly any one theory. It is more essential that they understand the ways in which the adjustments operate. The theories have been designed to explain the facts, and, if not viewed as tentative hypotheses, they may blind us to a clear view of these facts.

1. *The Instinct Theory:* The term "instinct" was used to describe certain typical unlearned responses observed particularly in animals. A bird will build her nest without training and does not have to be taught to sit upon her eggs to hatch them. "Instinct" *describes* such activities but fails to *explain* anything. The tendency to maintain one's individuality has been embraced under the head of the ego instinct. There is little objection to labeling it thus, provided we do not assume that such a description is put forward as an explanation.

2. *The Libido Hypothesis:* Freud used the term "libido" to indicate sexual desires in all their aspects. Jung has extended the use of the term to what has been designated by philosophers as the vital urge, something in the life of man which corresponds to energy in physics. According to this conception, libido is a sort of fountainhead from which flows the energy which actuates all the conduct of man. The instincts are regarded as issuing from a relatively unitary source, the primal libido. This energy flows out in various directions and actuates the various instinctive urges as well as later acquisitions of the race and the individual. It is a stream which is constantly subdividing and attaching itself to ever-new aspects of life.

The two most basic expressions of the libido (according to Jung) are in the directions of self-preservation and race-preservation. Any activities or responses that endanger these two are consequently inhibited in favor of those that further them. Other acts are motivated by energy split off from these two main streams.

This doctrine has performed a service, probably, in using a word to designate a concept which, when called "vital urge," had intricate philosophical and ethical implications. But again we have gone no further than devising a name.

3. *Urge toward Superiority:* When any individual is thwarted, an emotional reaction is set up. Alfred Adler has chosen to designate this emotional reaction as a feeling of inferiority, a fear of failure. The fighting reaction against such a fear of inferiority is an urge toward superiority. This method of looking at the situation describes in a fairly accurate manner some of the actual responses that are made by an individual and does a further service in indicating that the environment has an important part to play in the expression of the urge to integration.

4. *Autonomic Tensions:* Edward J. Kempf has emphasized the relation of the autonomic nervous system and the concomitant emotional reactions in the struggle of the individual to maintain his integrity. He has pointed out that any situation which tends toward disintegration causes a very marked autonomic tension which is relieved only when the individual's situation is changed so that integration is advanced. This theory considers the urge toward integration to be an emotional one based on a certain physiological structure of the body.

The four theories suggest different names for the essential process of integration, but they do not explain the nature of the urge toward integration. Future research may reveal the essential characteristics of this urge, but, in the meantime, you should bear in mind that these theories are descriptive and not explanatory and should avoid the temptation to adopt a name in lieu of an explanation. Nothing inhibits exploration in science more completely than making a fetish of a name.

MODERN PSYCHOLOGY has shown clearly the significance of individual differences. These are important not only in the specific realm in which they appear but also in their indirect effect upon the rest of the individual's life. We shall consider personal equipment under three heads.

1. *Mental Ability:* A dull child may develop very placidly in an environment where not too much is expected of him. He responds in a manner characteristic of his limited ability and probably recognizes the fact, before he is very old, that others are cleverer than he is but takes it as a matter of course and may mature into a very docile individual.

The same person, confronted by situations too difficult for his limited intelligence, may get into various predicaments. Having done something at the suggestion of a more intelligent person, he may be amazed to find himself being punished for what was to him an innocent performance. As a result, he may develop anything but a tractable disposition. He may cultivate cunning to help him over his difficulties; he may be filled with a feeling of his own incompetence and

fight against it or he may assume an attitude of hate toward those who cause him so much discomfort.

At the other extreme, a bright child may find life too tame and commonplace. He may come to depend upon his cleverness to avoid the more monotonous duties of life — become extremely arrogant because of his feeling of superiority and develop into a malevolent person with whom no one would care to live. A personality study involves not only a knowledge of the degree of intelligence but also an understanding of the secondary attitudes built around this factor. It is not enough for a teacher to know a child's intelligence quotient: His emotional reactions and the use he makes of his intelligence should also be considered.

2. *Health:* The most important personality modification that may result from an illness is not the direct effect of such sickness upon the nervous system but the indirect effect upon the rest of the personality. In illness one is treated with great solicitude, which is enjoyed despite the attendant suffering. Any mother can testify to the fact that the disposition of her child is quite different after a serious illness. She will state that she has to "train him all over again." In this retraining process she may be only relatively successful. In any case, the disposition is radically changed because of illness. In many instances complicating circumstances enter to make the effect of illness even more serious. If a child fancies himself mistreated during his illness, hatred or cruelty may ensue. Specific phobias of doctors, nurses, ether or disease may develop.

If an individual's illness enables him to escape something more undesirable, such as warfare, he may become sick upon the slightest provocation. It can be easily demonstrated that such a development is rather common. If a quiz is announced in a classroom, there is a probability that a greater number of students than are customarily truant will be absent from this quiz. Many of these give the excuse that they were ill. The author cured his class of this tendency by announcing that there would be no excuses granted for absences unless the student's physician telephoned in advance and reported the illness. After this announcement there was practically perfect attendance. Surely this was an easy way to promote health in a student body!

In addition to the specific effects of an illness upon an individual is the fact that his attitude toward life may be strikingly altered by his physical condition. A sound philosophy of life is more likely to develop in a healthy body than in a diseased one. In studying the effects of illness, we should attempt to determine as far as possible how the outlook was modified by illness. Some persons are no doubt helped by illness, while others are pushed further toward disintegration.

3. *Physical Appearance:* Unfortunately, adults are sure to impress upon a child, in his most formative years, their attitude toward his physical appearance. Many a girl has become egocentric because a doting mother or someone else has remarked upon the child's beauty in her presence. Children's attitudes have been distorted by hearing personal remarks made about them by parents, other relatives or neighbors. "Isn't he just the image of his mother? He must be Mother's boy." "He's a chip off the old block. He has all his father's tricks." We may think that impressions from such remarks are not lasting, but much evidence has come to light to indicate that they are.

The values that a child places upon material possessions are in most instances the direct result of the attitude of his parents or guardians toward material things. These soon become accentuated by comparison with the possessions of other children. A child will naturally be satisfied with a few toys until he finds that his parents bemoan the fact that he has no more — or that other children have more to boast about than he has. Most parents are familiar with the experience of buying expensive toys for their children only to find that they prefer some very ordinary playthings.

Once impressed with the fact that he has little, the child may exhibit various reactions. He may set about acquiring things in the easiest manner — stealing them. He may wreak vengeance upon the more fortunate by breaking their toys. He may shun companionship because of a self-deprecatory attitude. He may imagine that he has countless possessions and live in a world of fantasy. He may relate the contents of such fantasies as if they were real and, in the eyes of his elders, be a liar, or he may develop an ambition to become a great man so that he will have the means to acquire all that he wants. Many of the foibles of grown men are the result of attitudes developed by their being deprived of coveted objects as children or, rather, by their *feeling* that they were deprived. It is very easy for a child to overvalue material possessions and their importance.

As IMPORTANT as any other personality trait molders are the home relationships in which the child finds himself — the personal interactions of the different members of the home group. What, on the surface and to outsiders, may appear to be a perfectly adjusted and happy household may to some particular one of its members be a place of torment. A home which appears to the outsider as a veritable nest of evil may be the means of producing a strong character in the child reared in it. An adequate understanding of any person's individuality cannot be obtained without some knowledge of his family background and the attitudes developing from it.

The most significant influences are often the subtle ones which neither the parent nor the child recognizes. The temptation is to oversimplify these relationships — to search for a specific family situation which will explain any peculiarity in a person. The interrelations are so many and so far-reaching that no such simple formula can be found. The child's personality is not characteristically the result of the influence of father, mother, brother, sister, aunt, uncle, nurse or others who happen to come into his life but is dependent upon an intricate combination of all these influences working together. A child may derive one attitude from one family influence, another attitude from another source. Furthermore, as we have stressed, personality is never static, and so one attitude is constantly changing into a succeeding one.

Since family relationships are of such vital importance in personality development, it may be profitable to examine in some detail the specific effect of some of the most striking forms that these relationships take.

1. *Dominance of One Person:* The fact that each of our lives is influenced by a number of individuals is one of the

most beneficial features of environmental modification. This permits any one person's outstanding idiosyncrasy (which might have an undue influence upon us) to be softened by the influence of other persons, who may counteract it and at the same time add influences of a different sort. Nevertheless there are some instances where a particular individual exercises a dominant influence. Such situations are always fraught with danger.

(a) Small Family Group: An outstanding illustration of the possibilities in one dominant influence is the home where there is an only child. An only child is the center of attention whether there be one adult or more in the family, and so he is likely to become unduly influenced by the particular individuals who train him. "Spoiling" of this sort is aggravated when it is accomplished by one member of the adult group.

(b) Extreme Adult Interest: Various situations may lead to the development by an elder of undue interest in the child. If a mother has lost her husband, she naturally looks to her child for comfort and showers her affections upon him. Marital incompatibility of one sort or another usually brings the child to the focus of attention more than he otherwise would be. Other members of the family – grandmothers, aunts, grandfathers, uncles or other relations having unsatisfactory lives of their own – may take it upon themselves to "do the best for the child." Usually this means the "best for the adult." They do service and homage to the child not for "his good" but for their own, and then they rationalize their conduct by thinking they are doing him a service. When analyzed, most of the interest that adults have in children is selfish in nature and is not a reasoned program calculated to be of benefit to the growing personality.

Few of us have failed to see specific instances of a mother who has transferred her affection from her husband to her son. In such cases it is very easy for the mother to urge her son not to marry, saying: "What shall I do if you marry?" This undue affection, in a lesser form, often accounts for a mother's feeling that no girl is good enough for her son. Rivals are always unworthy.

(c) Emotional Crises: If, in the event of some bereavement or other crisis, a particular individual brings relief, it is natural for the child to look to this person with extreme interest and devotion. Usually other events will divert interest from such an influential person, but sometimes this does not occur. If the one providing such influence happens to derive enjoyment from this devotion, he is likely to endeavor to continue it. We are not intimating that such a condition is necessarily detrimental, but, if carried to extremes, it provides a narrowing influence on the child's personality. No one person, no matter how valuable his influence, can provide stimulation of sufficient breadth and variety to develop the best type of personality.

2. *Unfortunate Family Groups:* The combination of personalities is different in each family situation, and each must be studied separately. Nevertheless, we can indicate a few outstanding family groups which will indicate the principles involved in family influence.

(a) Where the Child Is a Bond between Mismated Parents: In such a family the child is usually torn between two conflicting attitudes. One parent may hate the child because he is an obstacle to dissolving an undesirable partnership; the other may look to him for comfort. This leads to an unnaturally strong positive affective reaction to one parent and a strong negative affective reaction toward the other. The child feels this strained relationship and is likely to be lonely and consider himself neglected despite the particular attention he gets from one parent. As he grows to maturity he is likely to feel inferior – and dissatisfied with life in general.

(b) Divorced Parents: While separation of the parents may relieve the situation described above, it brings other conditions which have a different (but just as serious) effect. If the child is given to the parent who loves him, he is likely to receive undue affection. He takes the place of the departed spouse in the affective life of the guardian and is consequently "spoiled." The indirect consequences of such a situation are very far-reaching. If the child happens to be given to the parent who does not love him, the situation is even worse.

(c) Parent Jealous of Child: Where the bond of affection between husband and wife is none too strong, one parent or the other may become jealous of the attentions that the child receives at the hands of the other. Since the mother is usually the one who gives the infant the more attention, it is more often the father who is jealous. We have encountered cases where the reverse held.

(d) The Parents Who Magnify Their Illnesses: A woman may magnify her ill health either to win attention to herself or to bring out the gentler traits in an otherwise coarse husband. This has a varying effect, depending upon whether the child concerned is a boy or a girl. In either case the child is likely to sympathize with the mother and to hate the father if the latter does not accede to every wish of the sickly mother. A girl may pattern after her mother and learn the same tricks, or she may resent the fact that her mother has to suffer so much and take the initiative in providing for her. She thus develops a masculine protective outlook upon life and hates the coarse type of man that her father appears to be. A boy will also usually take his mother's side in such a situation and become his mother's hero, taking the place of the father in his mother's affections. An analogous situation prevails when it is the father who craves attention and becomes ill in order to obtain it.

(e) The Devouring Parent: An egocentric parent sees the world only in terms of selfish desires and ambitions. To such a parent a child simply spells an opportunity to work out in him a career in which the parent will delight. The child is forced into the preconceived mold of the parent, with no thought for what might be best for the child. A mother of this type will follow son and daughter and cling to them even after they are married and will want to mother the grandchildren as well, thus providing the typical mother-in-law problem. A father will mold his son into a business or profession to his own liking or will endeavor to shape the life of his son-in-law. If the father happened to get into a profession that he enjoys, he tries to make sure that the son follows in his footsteps. If he is displeased with his choice, he will select another for his son, but will, nevertheless, be just as insistent upon the latter's following it. The child may follow such guidance or may revolt emphatically from the course laid out by the father. Such revolt may be seen in the fact that quite a number of boys, when asked what they wish to do, reply, "Anything but what my father does."

A prime requisite for personality development is for each individual to learn to "stand on his own feet"; when a parent, for selfish reasons, encourages the child to depend upon him, he is really keeping him in an infantile stage and doing him an incalculable injustice. Many persons who are chronologically adults are babies in personality because of devouring parents.

(f) Rivalry between Siblings: If there is only one child in the family, he is the lord of the situation and, as we have seen, is likely to become so dependent upon the attention of his parents that he expects the same sort of treatment outside the home. The first-born always enjoys a period of complete dominance, which is rudely interrupted upon the appearance of a second child. This begins a rivalry between them for the attention of the parents. Judicious handling may reduce such friction to a minimum, but in many cases it persists quite strongly. The younger, being weaker, requires the protection of the mother or father. This protectiveness the older one interprets as partisanship, which, of course, only accentuates his jealousy. The younger plays upon the tendency of the parents to take his part and is likely to be the spoiled one, while the older is the disgruntled, neglected one, fighting for his rights. Additional children may modify such a situation but, in turn, may complicate it. In a large family the youngest child is likely to be the pampered one, getting the attention not only of the parents but of the older children as well. This is especially likely to happen when there is an interval of several years between the next-oldest child and himself.

The intricacies of family situations could be elaborated upon indefinitely, and even then all situations would not be covered The importance of all this is that the child must learn to adjust to the situation he finds in his home and that this adjustment is what gives the major portion of coloring to his personality. As he enlarges his world and makes contacts on the outside, he carries into these new relationships the patterns that he has learned in the home. Any device that he has learned he tries on his associates. Fortunate is he if his tricks do not succeed with his comrades, for then he tends to drop them and acquire better reactions.

If the parents keep him from such outside associations, they are merely strengthening the home pattern by eliminating opportunity for its modification by outside influences. If the home situation is of a desirable sort, no serious results may ensue from such limitation of environment, but if they are not of the right sort, the limitation may have serious results. Since it is hard to judge which is the case, the best procedure is to encourage outside contacts as early as possible, especially where the family is small.

FROM THIS discussion it may be seen that we do not have to depend upon the mechanism of biological heredity to account for the continuance of some situations in a family tree. Biological heredity may be an important factor in the continuance of bodily traits, but personality traits are primarily dependent upon social heredity. Kempf has said in this connection: "I have been able to find that the happy or unhappy experiences of a great-grandfather conditioned him so that he, in turn, unconsciously, conditioned the affections of his children, and they conditioned their children and so on to the fourth generation."

The foregoing gives us a perspective of the genetic growth of personality. If a teacher wishes to understand a child, it is obvious that she must know something of his home background — not of the material surroundings, however, so much as the personal relationships which exist in the home. We can see from this study that we all are the result of the interaction of various influences. Some individual tendencies have been inhibited by these influences; some have been cultivated. Some of our experiences have tended to tear us apart; some have tended to make us into more unified individuals. Each person is, in a very real sense, the result of all the elements that have preceded in his particular life history.

If we take a cross section of any person, we can usually find some traits or attitudes which are outstanding. The predominance of these may tempt us to describe the person in terms of his idiosyncrasies. These are, of course, a part of him, but we need to exercise care lest these overshadow the balanced normal expressions and attitudes which he manifests. If we are careful to study personalities only in their proper setting, we shall be less liable to the error of seeing only the outstanding peculiarities.

INTELLECTUAL TYPES: The intellectual types comprise all those persons who place unusual emphasis upon the rational processes. The various expressions of intellectual emphasis depend upon the motives underlying the emphasis, the motives, in turn, depending upon the way in which they chanced to give the intellectual feature of personality the dominance which it possesses in their lives.

1. *The Compensating Intellectual:* One important motive for attempting to excel in intellect is a failure or inferiority in some other realm, such as the physical. Intellectualism based upon such an urge takes an arrogant form which deprecates physical prowess or physical beauty. This overweening intellectual vanity leads its exponents to invent such phrases as "Strong back and weak mind" and "Beauty and brains never go together." Such a person pursues his chosen field with feverish zeal, realizing that if he fails in his attempt at compensation he is lost.

2. *Intellectualism as an Escape from Affective Failure:* Sorrows, disappointments over love, or other emotional crises may lead to a vigorous pursuit of intellectual activities. Such an intellectual becomes hard and cold in his logical analyses. He may carry over his intellectual dominance into religion, for instance, reducing it to a series of intellectual formulas and disparaging its affective value. He rationalizes about the emotional lives of others, seeing only calculation behind the romance in the lives of his associates. This type of intellectualism may be distinguished by the emotional fervor with which the individual pursues his chosen subject. He loves it with the fervor of a true emotional attachment: He has fallen in love with his intellect.

3. *Intellectualism as an Escape from Social Failure:* Intellectual activities are, in many instances, cultivated in isolation. Having failed to adjust to others, many persons find the retreat to a solitary pursuit of learning a very satisfactory substitute for social favor. Such intellectuals lose themselves in books. The acquisition of knowledge by disputations with their fellows is distasteful. You may hear such

an individual express keen disappointment when he has occasion to hear a lecture by, or converse in private with, the author of a book which he has greatly admired. His is an acquisition of knowledge which can rarely be converted into any pleasing presentation for the consumption of others.

4. *The Visionary Intellectual:* The visionary is one who, having failed to adjust to his present environment, escapes by substituting the delights of imagination. A large number of visionaries do not attempt to justify their fantasies, although others do attempt to explain them rationally. Sometimes a person of this type makes a crude guess which is later substantiated and thus gets credit for acumen which he does not possess. In every field of learning one has to be on guard against this type of individual. Once he is found out, one may take his conclusions for what they are worth.

5. *The Curious Intellectual:* Intellectual endeavors may be motivated by curiosity. In many instances the reason for the extreme curiosity is that the person was made unduly curious as a child by having certain knowledge withheld from him. Often a morbid curiosity about sexual topics becomes sublimated in a lifelong curiosity which finds an outlet in scientific research.

Unless such motivation is supplemented with definite science training and a certain amount of persistence, the scientist is likely to be superficial. He will begin a research project with great fervor and unbridled energy, will pursue it as long as there is much uncertainty connected with the outcome, but, once the end is in view, he will suddenly lose all interest in the project. Some shifts of scientific interest in very reputable scientists may be thus explained.

6. *The Exhibitionistic Intellectual:* The exhibitionistic intellectual manifests his presence by a morbid desire to see his name and productions in print. He wants recognition. He is a past master at making "much ado about nothing." He will take the smallest bit of scientific or literary lore and expand it to enormous proportions. His main anxiety is the reception given his work rather than its ultimate substantiation. How much easier it would be to ascertain what has been accomplished in any field of learning if it were not necessary to wade through all the literature produced by the exhibitionist who has chosen intellectual fields in which to display himself!

7. *The Cynical Intellectual:* Having abandoned all hope of ever attaining the things that he had hoped for, a person may defend himself by caustic comment upon the futility of life in general and by ridiculing those who are still laboring under the hope of attaining the things that he has failed to gain. With an intellectual person this type of reaction becomes more than an emotional outburst; it is supported by carefully constructed logical arguments purporting to show that everything is a delusion.

Such a person finds plenty of fuel for his fires, for almost anyone realizes that mankind is in the midst of a constant struggle which necessarily has its disappointing aspects. Ideals that were held sacred at one time are discarded at another; men of one generation sneer at the things for which their forefathers died. The cynicism of disgruntled individuals performs a service in that it keeps us from viewing life with too great tranquillity. The cynic is a harmless soul if he is not taken too seriously.

8. *The Balanced Intellectual:* The normal man enjoys an intellectual challenge but, if worsted, can still admire the intellectual prowess of his opponent. He realizes the limitations of his intellectual powers as well as his abilities and is not totally disgruntled when he learns that he has made a mistake. He recognizes clearly the part that bias plays in his reasoning and makes due allowance for emotional prejudices. To be sure, he values his intellect as probably the most important part of his being, but at the same time he realizes that its value is not enhanced by disparaging other characteristics which he possesses or by gloating over the failures of his less astute comrades.

EMOTIONAL TYPES: The emotionally balanced individual thinks well of himself but is not too much in love with himself; he enjoys the company of his own sex but prefers the other sex; he is emotionally aroused upon occasion but does not go to affective extremes — i.e., he controls himself without being afraid of himself for so doing.

As we consider some of the ways in which persons deviate from normal emotional reactions, let us keep in mind the fact that we are not considering specific types but trends or tendencies in several directions.

1. *The Self-centered Individual:* A person may justify an inordinate love for himself by the euphemism of self-respect; he may fail to recognize his autoinfatuation or he may recognize it and offer no apologies. Self-love often centers about some particular personal characteristic. An individual may be engrossed in his own sensations, in his skill in some direction, in his beauty of face or form, in his intellectual acumen, in his moral integrity or in his inheritance.

2. *The Homosexual Individual:* The term "homosexual" has been broadly used to designate anyone who prefers the activities, companionship and interests usually followed by those of his own sex to the exclusion of interest in the other sex. In extreme form, of course, it may be accompanied by an actual perversion. A large number of individuals have a homosexual preference to a rather pronounced degree. They can endure the companionship of the other sex for a time but are generally relieved when they find themselves in the company of their own sex. This is more or less natural with growing children, but in adults it signifies either a lack of adequate development or a regressive tendency. In some cases it has been fostered by a display of unnatural prudery by one's parents or teachers, which results in restraint whenever members of the other sex are present.

A homosexual is always hyperconscious of his sex. He cannot enjoy the companionship of those of the other sex on the basis of personality; he is continually aware that they are not of his sex. The existence and popularity of men's clubs, women's clubs and similar organizations that are sexually exclusive testify to this personality feature's prevalence.

3. *The Emotionally Uncontrolled:* This classification is designed for those who are relatively uninhibited. They are heard in public places boisterously laughing, telling everybody within earshot how happy or how sad they happen to be. They will inform a whole coach full of passengers, "Oh, how glad I am I came on this trip. It pleases me beyond words. Could anything be more wonderful?"

The uncontrolled individual also is apparent in other respects. He will fall violently in love with a girl, sweep her off her feet and be on the way to the altar, when he will become just as violently infatuated with another.

4. *The Emotionally Repressed:* Emotional education usually takes the form of training in inhibition. The repressed person is the one who has taken such training too literally. This inhibition leads to a substitution of fear for aggressiveness, a tendency to appear superficially happy and to hide any tendency toward sorrow, and a restraint of expression of affection. Such a person feels that it is disgraceful to give vent to any emotional activity; he makes a pretense of being intellectually motivated on all occasions and often appears hard and cold to the casual observer.

Closer scrutiny will ofttimes reveal that these apparently frigid individuals are, under the surface, seething caldrons. One individual, emotionally perturbed to the point of suicide, who, when talking about her vital problems, would writhe in agony, was described by another individual, living in the same house, as the most poised person she ever knew.

Such extreme repression is likely to give way under undue stress, and then it is that the individual shows extreme emotional reactions. The typical manic-depressive swings are based on this type of personality. Seen in a state of extreme elation or depression, such persons have the appearance of possessing no inhibitions. The barrier of reserve has finally broken, in such cases, and the whole personality is for a time flooded with the emotions which have been dammed up for so long.

5. *The Irritable Person:* The irritable person is the one who has more emotional stimulation than he has physical energy with which to respond adequately. He reacts to a new stimulus with wild enthusiasm and starts to work with extreme vigor but is soon exhausted, and if he finishes his projects, he does it on what is commonly called "his nerve." These persons may be observed to become more and more unstrung as their work progresses. They suffer from a conflict between a fear that they will not succeed – that they will break before they have accomplished their ends – and an overwhelming urge to succeed. The victims of this conflict may rave at friends and family or storm around in other senseless fashions.

6. *The Anxious Person:* The anxious person is beset by nameless and mysterious fears which attach themselves to everything that he encounters. He is continually finding new things about which to worry – seems to revel in them – so much so, that if one seeming object of worry is removed, another is immediately found. As we have seen, the victim of anxiety is usually afraid of himself, afraid of his own affective life – and so assumes the attitude of worry as an accessory inhibition to any free expression of genuine emotion.

7. *The Daredevil:* The audacious individual is usually manifesting an overcompensation for fear. He is at heart very easily frightened but manifests a courageous attitude to hide this fear. He is a bluffer who assumes an air of self-confidence which is dispelled when some real opposition arises.

8. *The Suspicious Individual:* When one has had his affective reactions toward others repelled or has met with treachery and deceit in others, his love turns to hate and he suspects the motives of others. If such experiences frequently recur, the victim develops a habitual attitude of suspicion and jealousy which colors his whole outlook upon life.

The balanced individual does not trust everybody, nor does he suspect everybody of improper motives. He tries to evaluate each situation in its true proportions and withholds his judgment until he has some basis for decision.

9. *The Aesthete:* From early childhood we are given the impression that to respond to our emotions is undesirable. Some persons take this type of teaching very seriously but still possess strong emotional tendencies. These individuals are very likely to build a graded evaluation of emotions, classifying certain ones as vulgar and others as refined, with the natural consequence that they strive to express all emotional reactions in the most refined manner. These are the aesthetes.

This enumeration of emotional types is not exhaustive, but it indicates the main trends that may be found in persons who deviate from normal emotional reactions.

THE KINETIC TYPES: The kinetic types may be divided into two groups: the hypokinetics, who lack energy, and the hyperkinetics, who manifest an excess of energy.

1. *The Hypokinetic:* The true hypokinetic individual lacks actual physical energy. He is relatively inactive because he does not possess the adequate drive to be physically active. Not all persons who have the appearance of inactivity are lacking in energy. It is possible to confuse an inhibited individual with a hypokinetic person. The hypokinetic individual can usually be distinguished by the fact that he continually attempts to do more than he has the energy to execute, whereas the repressed individual betrays his latent and repressed energy by inadvertent bursts of activity.

2. *The Hyperkinetic:* Hyperkinesis, or overactivity, can be manifested in a variety of forms, the most important of which are here discussed.

(a) The Emotionally Repressed Hyperkinetic: One of the favorite schemes of man for forgetting an unpleasant experience is to become so engrossed in work that his attention is diverted from the undesirable subject. Mental work is not the best type of diversion of this sort, because it brings the mental life into activity and the associations may easily revert to the taboo topic. Physical activity, on the other hand, if carried to extremes, often successfully keeps the mental life from being too active. Thus we may learn to forget our troubles in violent physical exertion.

Compensating activity of this sort can be observed on many occasions. Break in on a group of friends who have been discussing you and notice how they attempt to cover their confusion by a burst of silly chatter. If, just before departing for your evening's enjoyment, you receive some bad news that you do not wish your comrades to learn, notice how you become overactive and excessively gay.

The person who carries this type of escape to extremes flees from all his difficulties by excessive work. He runs from trouble by burying himself in work; but that does not relieve the difficulty, and eventually he breaks. The balanced hyperkinetic never breaks down from overwork. His activity is a healthful expression of boundless energy. When a person breaks from overwork, it very often is an indication that his work was an attempt to escape some mental difficulty.

(b) The Domineering Hyperkinetic: There is the type of hyperkinetic person whose stimulus to activity lies in overriding someone else. He gets satisfaction not so much from his own activity as from the discomfiture of others. He is commonly called a bully. He must always win, and his winning is usually paraded before the losing competitor to increase the latter's chagrin. Such a characteristic may be a sadistic manifestation, a result of compensation for abuse received from others or a compensation for physical inferiority. As long as such a person is winning, he will be stimulated to renewed activity. If he begins to lose, he will quit. He is a "poor sport."

(c) The Egocentric Hyperkinetic: There is a certain amount of organic pleasure that comes from activity. When this becomes the primary object for doing things, it is a sign that the person is very much wrapped up in his own feelings. The egocentric hyperkinetic is on the constant chase for such thrills. He talks about the glow from the feeling of well-being. He is content to get his workouts alone – in fact, prefers them that way, for then he has no one to divert his attention from his own sensations. Exercise for him is really a form of autoerotism. Such persons can be seen going on long hikes by themselves or playing golf all alone and can be detected by their continual discussion concerning the pleasure they derive from their exercise.

(d) The Exhibitionistic Hyperkinetic: The drive for this type is the adulation their exploits bring to them. This type of hyperkinetic will perform only in exhibitionistic games or in such activities as will bring prestige from their physical prowess. Exhibitionistic dancing, "strong man" performances and, in some instances, the activity of competitive games are followed by this type of person.

These departures from the normal in display of physical energy bring into relief the person who is balanced in his energy output. He enjoys physical exercise and indulges because of the sheer drive of physical energy. He is not striving to get an outlet for unduly repressed energy; he does not manifest any domineering, egocentric or exhibitionistic tendencies. He knows when he has had enough and stops for rest, just as the man who has partaken of a hearty meal stops because his hunger has been appeased.

SOCIAL REACTION TYPES: The personal types which we have considered furnish but a bare outlook of personality types. Most important are the ways in which the individual reacts to his fellows. Two predominant social attitudes have been distinguished (principally by Jung) as the introverted attitude and the extroverted attitude. The introvert is a person whose interests are directed mainly toward himself and his own experiences, while the extrovert is a person whose interests are directed mainly toward external nature and social phenomena. The normal man is motivated by both subjective and objective factors. At different times one or the other may predominate, depending upon local and temporary circumstances.

The two terms are of value, in spite of their limitations, in distinguishing the extremes of attitude which an individual may take. Since the description of these concepts by Jung, they have been glibly adopted by many writers and have come to be common terms. They are often erroneously used as synonyms for "sociability" and "unsociability."

While there is some confusion as to the essential nature of introversion and extroversion, we shall try to give some of the most essential characteristics of these attitudes. It should be remembered that they represent in an individual two diverse attitudes which he has developed by his social contacts.

CHARACTERISTICS OF THE INTROVERT

1. Thoughts, interests and activities all centered around himself.
2. Either indifferent or resistive to suggestions or advice from others.
3. Unpleasant situations tend to make him go off alone to brood. At these times his thoughts are concerned with himself.
4. Feels isolated. Thinks people do not understand him.
5. Seeks solitude.

CHARACTERISTICS OF THE EXTROVERT

1. Other people and surroundings more potent in determining thoughts, interests and activities than are purely personal factors.
2. Eager and willing to take suggestions and advice from others.
3. Unpleasant situations stimulate him to attempt to change the situations. If worsted, his thoughts turn toward plans to win next time.
4. Always in the swim. Does not concern himself with what others think.
5. Seeks company of others.

The preceding description of types will serve as a basis upon which to build a description of personalities. But we should repeat that these types are not mutually exclusive or static. A person may show contradictory manifestations, may have peculiar trends which are a combination of those mentioned (or perhaps trends that have not been included) and at different times may appear in quite a different light. Finally, because we have no adequate measures of any of these trends, our description will of necessity be qualitative. ♦

A man's character is the reality of himself: his reputation, the opinion others have formed about him; character resides in him—reputation, in other people; the one is the substance; the other is the shadow.

HENRY WARD BEECHER

BASIC PERSONALITY TYPES

by Robert S. Woodworth and Donald G. Marquis

OF THE ENORMOUS NUMBER of trait names in common use, many come in pairs of opposites, as cheerful — gloomy, masterful — submissive, kind — cruel. Because opposites are so convenient, we easily slip into the error of classifying people as either cheerful or gloomy, as if these were two sharply separated classes.

People do not fall into contrasting types. They scatter all the way from one extreme to the other, with the greatest number falling in the middle of the range — so we find whenever we are able to measure people in any respect. It may not be possible to measure cheerfulness, but certainly people are more or less cheerful rather than either cheerful or gloomy. The best way to utilize the everyday vocabulary of trait names is to place a pair of opposites at the ends of a line and regard this line as a dimension of personality, with individuals located at different parts of the line.

These dimensions, or traits, are analogous to the verbal, numerical and spatial abilities which are dimensions of ability. The question is whether any outstanding dimensions can be identified in the field of personality. By using pairs of opposites we could find names for hundreds of possible dimensions, but they would not be wholly different. The many traits overlap and can be reduced to a smaller number. The correlation method provides a check. Arrange a good sample of the population along the cheerful-gloomy dimension, and arrange the same individuals along the kind-cruel dimension. If the order of individuals is nearly the same in the two arrangements, i.e., if the correlation between the two arrangements is high, the two dimensions are largely the same. If the correlation is zero, they are separate and independent dimensions, like latitude and longitude in geography. Several systematic studies of the interrelation of traits have recently been carried out, and the table below presents a list of the most clearly established *primary traits*. The method of correlation, applied to the results of rating, questionnaire and test research, enables us to systematize the multitude of personality traits into a smaller number of primary traits. A primary trait includes several specific traits which are correlated with one another and therefore have much in common. The 12 primary traits are relatively independent:

PRIMARY TRAITS	OPPOSITES
1. Easygoing, genial, warm, generous	1. Inflexible, cold, timid, hostile, shy
2. Intelligent, independent, reliable	2. Foolish, unreflective, frivolous
3. Emotionally stable, realistic, steadfast	3. Neurotic, evasive, emotionally changeable
4. Dominant, ascendant, self-assertive	4. Submissive, self-effacing
5. Placid, cheerful, sociable, talkative	5. Sorrowful, depressed, seclusive, agitated
6. Sensitive, tenderhearted, sympathetic	6. Hard-boiled, poised, frank, unemotional
7. Trained and cultured mind, aesthetic	7. Boorish, uncultured
8. Conscientious, responsible, painstaking	8. Emotionally dependent, impulsive, irresponsible
9. Adventurous, carefree, kind	9. Inhibited, reserved, cautious, withdrawn
10. Vigorous, energetic, persistent, quick	10. Languid, slack, daydreaming
11. Emotionally hypersensitive, high-strung, excitable	11. Phlegmatic, tolerant
12. Friendly, trustful	12. Suspicious, hostile ◆

MECHANISMS - *Devices of the Mind*

by S. H. Kraines and E. S. Thetford

EVERY YEAR A FANTASTIC number of fantastic devices, gadgets and contraptions are invented and patented. They are as nothing – in number or nature – compared with the "mechanisms" which man has "invented" in his attempts to elude pain and obtain pleasure.

Mechanisms are psychologic devices, the ways in which attitudes express themselves, abortive attempts rather than successful techniques to follow the pleasure-pain principle. They have their origin, as do attitudes, from which they are inseparable, in the complex situation of man, with his innumerable, insatiable and often contradictory desires, living in a world of countless prohibitions, postponements and frustrations.

Civilization has spawned a million fears, all of which man has inherited. It has made realities of abstractions – shame, disgrace, fame, goodness, failure – so that if one hunger is satisfied, one danger overcome, there are a million more to goad and lash. Civilization has labeled practically everything with "You can't," "Mustn't touch," "Danger." Very rarely has it said, "This is the way to get what you want" or "This is the way to eliminate or alleviate pain." Pains and pleasures are positive; most of the commandments and laws are negative. Plenty of specific regulations as to what *not* to do; precious few as to *what* or *how*.

ALL MECHANISMS have several common characteristics:

1. Mechanisms are inseparable from the attitudes they express and create.
2. Mechanisms, like attitudes, are unpredictable, i.e., the same stress may evoke different responses.
3. Several mechanisms may express a single attitude.
4. Conversely, a single mechanism may express several attitudes.
5. Mechanisms, like attitudes, tend to appear in constellations.
6. Mechanisms develop unconsciously, without deliberate planning.
7. Mechanisms operate automatically, usually without awareness.
8. Mechanisms may release a minimal amount of attitude-engendered tension.
9. Mechanisms produce more tension than they release.
10. Mechanisms "irradiate."
11. Mechanisms are important as symptoms.

Perhaps the last three characteristics should be elaborated. The natural orientation of the body is that desire or fear should lead to action; if the action occurs, the energy mobilized for the occasion is released. Unreleased energy remains as tension which will manifest itself, physiologically or psychologically, in mechanisms via attitudes. The symptoms – tension-produced – create still more tension. It's a vicious circle: (1) Release is inadequate because the attitudes continue their operation; (2) the mechanism produces situations which intensify the tension-creating attitudes; (3) mechanisms tend to increase both the extent and intensity of tension.

A man with inferiority feelings, seeking to avoid pain by avoiding situations he feels inadequate to meet, may use the mechanism of withdrawal, but, by withdrawing, he shuts himself off from the response of his fellows and so adds new pains: loneliness and the sense of being unliked, unwanted. He has not escaped the initial pain; he has merely added.

Mechanisms, like attitudes, irradiate; they lead to one another and in all directions, with attitudes and mechanisms intensifying and extending each other. The operation may be merely "spreading," or it may call in new mechanisms and attitudes to bolster the original one. For example, one whose hostile attitude releases itself through "intolerance" may start with a single unpleasant experience and enlarge it to include all other tenuously connected and even wholly unrelated groups.

By irradiation, attitudes and mechanisms attract others of the same type. The insecure man may develop rigidity in an abortive attempt to achieve stability. Others will not conform to his notions, so he develops antagonism, which he expresses in nagging, faultfinding or hypercriticism, which he then rationalizes. Rationalization enables him to extend the boundaries of his intolerance etc. (It's comforting to remember that beneficial attitudes and effective techniques are also contagious!)

Mechanisms are symptomatic and, only as such, are important. Finding the cause of any symptom is essential to cure. If a patient has a raging fever caused by a ruptured appendix, he will die if all that's done for him is to reduce his fever with aspirin and alcohol rubs. Rapid loss of weight may indicate a malignant growth or, equally well, an acute state of depression. It is vital to know the cause before treatment is given. In neither instance would artificial feeding be valuable, even though it temporarily increased weight.

Often, however, it is good to alleviate a particularly distressing symptom in order to expedite finding and correcting the cause. An overly critical person will not be cured of his basic hostility by refraining from criticizing politicians and/or his wife, but he will profit from such control. So will his wife. He will demonstrate to himself that (1) he doesn't *have* to utter every disagreeable thought he can hatch; and (2) he will not create new sources of irritation. There will be two fewer tributaries to feed the steam of vituperation.

SINCE HUMANITY works on the pain-pleasure principle, naturally mechanisms fall roughly into these two categories. There are sound reasons why pain-escaping mechanisms outnumber the pleasure-seeking variety. In the first place, we rarely attempt to explain pleasure: its origin, nature, significance or why we "deserve" it. Pleasure obtained presents no problems.

However, thwarted efforts to attain pleasure become pains. If a child wanting affection and attention has indifferent or unkind parents, their attitudes are pains to be overcome. The child may withdraw; retreat into fantasy; take it out on others – verbally or otherwise; identify himself with some other person or group – good or bad; carry to all other situations his sense of inadequacy and frustration. There's no telling what device he will employ, but it's certain that somehow or other he will try to escape the ego pain of being ignored or abused.

To THE EXTENT that a substitute device achieves authentic satisfactions, it is good. Some do. Among the most widely used pleasure mechanisms are: compensation and sublimation, attention-getting devices, vicarious sex experiences and identification.

When a person compensates or sublimates, he is attempting to make up for some lack, handicap or inability; seeking to minimize what he hasn't by magnifying what he has; attempting to redirect a frustrated desire. It is good that one with impaired vision can increase the keenness of his other senses. It is good when a not-so-pretty girl cultivates charms other than beauty and the boy strives to excel and lead in other activities than those of which he is physically incapable. It is good when one can express and release frustrated sex desires in creative work or art . . .

The danger in compensation is that, unless it is used with some conscious awareness, the initial sense of deprivation will remain and the ego wound, though concealed, will fester.

Theoretically, we all know that agility of wit is more important than nimbleness of legs and that strength of character is more to be desired than strength of muscle. Practically, we continue to exalt physical prowess, spontaneously listening more attentively to the six-footer than to some little shrimp. And the little shrimps suffer. It is good to know that small stature can be compensated for and to set about doing so. If, however, a man refuses to face the fact for exactly what it is worth, if all he achieves is a booming voice, dictatorial manners and ruthless aggression, then no good is accomplished for anyone. His feelings of inadequacy persist; he is at worst a social menace, at best, a bore – often a boor.

True compensation can be achieved: A man will not rejoice in his small stature, but he can so lose himself in genuine interests and rewarding pursuits as not to be consciously aware or unconsciously greatly disturbed by his "handicap." Napoleon never quite forgave life his Corsican birth or his small stature. He bathed Europe in blood to prove his strength. Steinmetz (a hunchback), the wizard of General Electric, worked out the law of hysteresis, the mathematical symbols of which are the pattern of all transformers everywhere. And he never lost faith that human nature, like dynamos and power plants, can be improved. His work as a mathematician and his unremitting efforts to actualize his dream for a good earth precluded self-pity or the pity of others. His compensation was personally and socially as good as Napoleon's was personally self-defeating and socially evil.

The girl who attempts to make up for her unpopularity by being the best student in school has not really compensated. However high her grades, however scornful her speech about "boy-crazy, empty-headed girls," she still is gnawed by envy, still wishes to be popular. If, however, lacking the prettiness and the pretty clothes every girl wishes, she attributes her lack of dates to lack of external beauty, she may really compensate by: (1) admitting she doesn't have what she wishes; (2) sizing up the situation as to what assets she has to meet the requirements; and (3) deliberately cultivating the popularity-winning characteristics within her power. Being a woman, she will never cease wishing she were pretty, but being popular, she will not focus attention on what she lacks or be chewed up with envy of every pretty girl she sees. There can be real compensation.

Compensation and sublimation are unquestionably substitute mechanisms. At their best, they are not lazy refusals to work for what one most wishes but acceptances that some handicaps and frustrations are inescapable – deliberate refusals to have one's life embittered or distorted if other pleasures and satisfactions can be attained. The more honest the acceptance and the more deliberate the choice of substitute, the more likely is the mechanism to be good.

There are a fortunate few who know exactly what will give them most pleasure, have ingenuity and perseverance enough to chart a path toward their destination and pursue it – and who arrive successfully. Many more persons, equally certain and equally willing, meet insuperable obstacles and must detour. Some insist on battering themselves to bits on the immovable barrier; some refuse to budge – and make of the barrier a wailing wall; still others move in another direction but do it so grudgingly, so resentfully, as to miss all pleasure. The wise man and the man of courage deliberately compensate, deliberately sublimate.

THE EGO'S NEED for attention is like the body's need for food. Human life is desperately lonely – lonely and trivial. In countless ways man seeks companionship, tries to feel important, needed, maybe even indispensable. Admiring attention is what every person wishes, but he'd rather have disapproval than be ignored. Violent opposition is preferred to having one's personality or ideas shrugged off as too inconsequential to be considered. It is always hard to get others' attention. Even loving parents talk over their children's heads, pursue their own interests, are concerned with their own affairs. Children are told to "hush," "run along," "stop bothering." Other times the attention is so obviously superficial or simulated that the child has no satisfaction. Every person feels himself the center of the universe, but it's extraordinarily difficult to get recognition, let alone adulation . . .

Many parents, to the utter weariness of their friends, cultivate their children's show-off tendencies, having them dance, recite, torture the piano or violin or otherwise perform. Often the children delight in occupying the center of attention, and the parents bask in the reflected glory of their offspring. Only the guests suffer.

IF FORCED TO IT, a child will resort to tantrums to gain attention. A disapproving or a punishing audience is better than none. Early in life, children learn the fine art of "blackmailing" their parents into "recognizing" them. Such exhibi-

tions are not confined to children. Often by being intensely disagreeable, "putting on a show," a person succeeds in getting attention or "service."

The money a man spends, the effort he exerts to be elected, made chairman, get the medal, see his name in print! Distinctions must sometimes be made between personal motives and the social good accomplished. A man may work slavishly hard in a good cause and his work accomplish significant results, even though his personal motivation was the rather pathetically childish determination to make such a showing that his name and picture would get into the paper or that he'd get to sit at the speakers' table when the campaign, drive or what-not was concluded.

Publicity agents could – at the risk of their jobs – tell a diverting story of the accounts they carry. Everyone is accustomed to the idea of agents for actors and authors but would be surprised at the publicity accounts of businessmen, ministers and society folk. (Of course, some pay to keep their names *out* of the papers!)

Men and women wangle to have "honorary" degrees conferred and whenever possible have those magic letters attached to their names for public display. Most honorary societies sell pins, keys and badges, and most members proudly wear them as conspicuously as possible. There is nothing "wrong" with pin-wearing or degree-publishing unless it is an attempt to get attention not otherwise forthcoming. Then it is "wrong" only because it is such a pitifully poor substitute for what the ego really needs. (Incidentally, the person too scathingly critical of the key-wearers, the degree-flaunters, is often – by the intensity of his reaction – revealing an equally insecure state, the real basis of his objection being envy.)

There are many ways in which persons seek attention: by clowning, acting the fool, being the "life of the party," dressing conspicuously, cultivating accents, mannerisms, poses. Probably no person is so secure as never to resort to attention-getting mechanisms, but here again the significant qualities are the intensity and extent to which they are used.

Ordinarily, one who overuses mechanisms for attaining attention will resort to many other devices. He is usually aggressive, else he would withdraw from, rather than fight against, the pain of being ignored. Insecurity and aggressiveness make a bad combination, for insistent riveting of attention upon oneself usually leads to callous disregard of others.

ONE OF THE MOST frequently employed, potentially "best" of the pleasure mechanisms is identification, by which a person merges his personality with that of another, a group or a cause. The basis for identification is as fundamental and "natural" as the gregarious nature of man. Man is forever trying to escape the terrifying sense of loneliness that haunts every life. We need companionship: Sorrows become more endurable when shared; joys, keener; dreams, more compelling. We need the strength, support and sustaining power of meaningful associations.

In identification, one imitates external manners and/or reflects the spirit and attitudes of another: Whether this process is good or bad will be determined by the character of the "object" with which identification is made – as well as the extent to which the mechanism is carried.

On its lowest level, identification means loss of personality; on its highest, it makes possible the most complete self-realization. There is significant difference between "merging" and "absorbing." It is always to be deplored when individuality is lost; man should be more than an echo or mirror. Our democratic concept, our Western ethic, is rooted in the conviction that each man is tremendously important in his own right and that his "rights" mean not only privileges but obligations as well. The big danger in identification is that both privileges and obligations will be abnegated.

THERE ARE THREE major kinds of identification: (1) personal, (2) group and (3) cause; and among the three, there are many internal relationships. In its simplest form, personal identification works this way. *A*, feeling insecure, inadequate, fearful, sees in *B* qualities he admires, feels he lacks, wishes he had. *A* begins to "copy" the externals – the manners, speech, clothes, gestures, tone of voice. If the identification is thoroughgoing, *A* not only apes externals but also adopts *B's* attitudes, assumes the same enthusiasms, cultivates the same hatreds. *B's* opinions become final truth, his judgments not to be questioned.

It is wholly normal for a child to have a succession of heroes: his father, an older brother, Buffalo Bill, Superman, Charles Lindbergh, Willie Mays, Louis Pasteur, St. Francis of Assisi, Teddy Roosevelt, Franklin Roosevelt, Eisenhower – anyone whose character or achievements capture the imagination and arouse the desire to be "like." Such hero worship can shape ideals, furnish standards, act as spiritual vitamins.

Unfortunately, it is equally possible to take the wrong models: the neighborhood bully, the daredevil "gang" leader, the "successful" shyster, the powerful (though crooked) politician, the glorified economic bandit. The person using the mechanism of identification is seeking strength outside himself – trying to find support, recognition which he has not been able to achieve for himself. The wise parent, teacher, coach or leader guides and directs, steadies and helps, builds and creates, seeing to it not only that weakness is strengthened but also new powers evoked. The egotist, on the other hand, exploits weakness, keeps his satellites in subservience, fattens his ego at the expense of others. The picture is even darker if, in addition to being an egotist, the object of adulation is antisocial or criminal.

It cannot be emphasized too strongly that blind adulation is always bad – bad for worshiper and worshipee. Heroes are human; all idols have clay feet. If the adorant has any judgment, he is bound eventually to see the faults, recognize the limitations, of his hero; the more uncritical his adulation has been, the more shocking will his awakening be. The world is filled with disgruntled, disappointed "idealists" who could not sustain the shock of discovering the imperfections of the person or cause to whom or which they had given unqualified and uncritical devotion. If slavish devotion continues and the defects go unrecognized, the situation is equally deplorable. A potential *man* has become a mere shadow, an empty echo.

A TYPE of identification inevitable for all stems from the fact that human life is social life. Man moves and lives not

as a solitary pilgrim but as part of many groups: familial, racial, neighborhood, school, economic, political, religious, cultural etc. Some associations result from the accident of birth; some, from the force of circumstances; still others are voluntary and deliberately cultivated.

Group identification is more pervasive in effect than any other type. For one thing, such affiliations are inevitable and automatic. There need be no seeking — conscious or unconscious; one just *is* a member of his national, sectional and family groups; even when unaware of any particular bond, he is nonetheless emotionally involved. "Family ties" may gall, chafe and bind, or they may be a "safety net" offering protection, no matter how hard the fall, but — chaining or protecting — they are there. A middle-aged man may unconsciously try to demonstrate that he is free of his father's iron discipline or prove he is worthy of the affectionate approval that as a child he failed to get. Equally well, in trouble a man may turn instinctively, in his feeling, to the father who always understood and helped him out of scrapes — though his father has been long dead.

In the curious fashion with which everyone tends to cherish whatever is his, man will defend his "inherited" and involuntary groups. He may have wished to leave his native land and be delighted to live elsewhere, yet he will have an emotional sense of kinship when he meets a native brother; often to his amazement, he will find himself resenting, countering, denying an "outsider's" adverse comments, though they are mild in comparison with the things he has himself both thought and said. In time of war there are countless evidences of this same kind of group loyalty in persons torn between loyalty to the country of their adoption and a feeling that they cannot hate and fight the country of their birth.

Then, too, the nature of the group as opposed to the individual means that its influence is potent. The strength of the group, its power — for evil or good — is not only greater than that of the solitary person; it is even greater than the sum total of all constituent members. Three evil men working together can wreak more harm than could those three operating independently. A lynching mob or gangster nation has in it many who, unassociated with such activities, could never personally be cruel, let alone savage.

The hope of humanity lies in the fact that the reverse is equally true. Three good men working together can create more harmony, peace and goodwill than could those same three unassociated. One man living in a rat-infested tenement hasn't much chance of keeping his rooms clear, but if all the tenants wage war, the rats don't have much chance. They would have no chance at all if the entire community resolved to be ratless. One man working alone cannot solve the problem of cancer, but the researchers, physicians, cooperating patients, the millions who can contribute much or little financially, all working together, are moving toward the solution. Our folly and shame are that too often we have merely deplored the harm of evil groups without mobilizing energy to use group strength for good ends.

The danger of groups is that they may become pressure units; they may become ends instead of means. The group was made for *man* — not *man* for the group. If the group dictates, demands unquestioning obedience, asks its members to resign their intelligence and initiative to its compulsion, then it is making men into robots, and its effects will ultimately be evil.

THERE IS ENORMOUS emancipation in realizing that loyalty and subservience are not identical — whether in personal or group relationships. There is no perfect person or organization. Consequently, no man or group is entitled to say: "Do as I dictate. Think as I tell you. Read only what I recommend. Resign your intelligence and your will into my keeping." Loyalty is not blind. The finest loyalty is devotion without false illusions, cooperation without subservience, striving for, not claiming, perfection.

There is a hierarchy in groups — good and bad — as in everything else. Some are more meaningful, more significant, more rewarding, than others. Heading the hierarchy is that most meaningful, significant and rewarding of all groups, variously called: "The Good Life," "The Brotherhood of Man," "The Kingdom of God." Whatever temporary support and energy may be given to the weak, timorous or cruel by identification with groups based on hatred, fear, exclusion, such groups and such identification are ultimately self-defeating. It is good to love one's family, have a warm, sustaining sense of identification, of shared hopes and ideals. It ceases to be good when it leads a member to "look down on" others, emphasize privileges rather than responsibilities, excuse, rather than correct, faults.

It is good to love and be loyal to one's community or country, but the most loyal citizen or native is concerned with perfecting his own rather than deriding or persecuting another. He wishes to help his city or country grow in strength and value — but not at the expense of others. Nor is he blind to what should be corrected: Loving "Walden" does not obligate one to love mosquitoes any more than loving Manhattan implies one must cherish clattering traffic or rickety tenements.

Loyalty to one's professional or workers' organization, to one's church, is good, but not if it breeds exclusion, distrust, stagnation; not if it violates the very principles on which it was founded: the improvement of the individual through cooperative effort.

The listing should be continued to include every possible group. Identification is good to the degree that (1) the group is "good," sustaining rather than suppressing the individual and directed toward ideal rather than selfish ends; (2) the identification is voluntary and discriminating; and (3) the relationship enables the individual to contribute and expand.

IT WOULD NOT BE GOOD to eliminate groups even were it possible. Good men are better and stronger when they can add their weight to the power of ideal groups. The highest level of identification is that in which a man deliberately, consciously and with some degree of consecration chooses the cause which seems most nearly in line with his hopes and dreams and thereafter devotes his energies to actualizing the aims of his group. He is not swept along in blind loyalty; and, since he does not expect perfection from leader or organization, he will not be crushed by partial failures.

Theoretical belief in a cause is not enough, and that fact

explains the relative ineffectiveness of so many well intentioned persons. They'd like "liberty, equality, fraternity"; deplore "discrimination"; have nightmares about war and dream wistfully of peace; have a pleasant emotional glow when any of the beautiful words are uttered. But they *do* nothing. Significant identification with a cause is not a matter of theory or of externals but rather a devoted, selfless working with and working for.

Koch did not stop with his concern over the thousands that die of tuberculosis; convinced the cause could be found — and despite privation, ridicule and opposition — he worked doggedly until he isolated the germ and thereby became the benefactor of all mankind. The daydreams of the Wright brothers have been shared by millions watching the flight of the birds and thinking, "How nice it would be —." But the *Kitty Hawk* came into existence only after dreams had given way to work and experimentation. In every settlement house in the world the name of Arnold Toynbee is revered. He identified himself with the plight of London's poor to the extent of doing something about it.

HAVING A CAUSE — any kind of cause — is good. It focuses attention elsewhere than on self; in its light, many minor ailments and irritations are simply blacked out. A man greatly concerned with establishing playgrounds in a neighborhood heavily populated with underprivileged children doesn't have much time to wonder whether his employer "looks down on him" or to be "hurt" because he is sure that persons make fun of him behind his back. The mild aches and pains which can become the starting point for a long chain of worry, concern, intensified pain and more worry go disregarded if one is bent on accomplishing something that seems important. It is amazing how many spontaneous recoveries occur in times of crisis. When there is a job to be done and done quickly, persons forget their minor troubles, so engrossed are they in the task at hand. Aching feet and hearts alike are forgotten when one is steadfastly pursuing a goal . . .

History tells of many whose greatness lies in the cause with which they identified themselves, as instigator or follower. Thomas Paine, a man of many sorrows, the victim of poverty in early life, crucified in old age by misinterpretation, renewed poverty and ostracism, had one period at least of significant self-realization. During the American Revolution his words, more than anything else, furnished the necessary spark to start the fires of freedom. His *Common Sense* and his *Crisis* papers were undoubtedly America's first "best sellers," though they brought him no prizes, no monetary rewards. He was in some real sense the "voice of the people," making articulate what countless freedom-loving men dreamed vaguely and by the fervor of his words galvanizing dreams into action.

Call the roll of the great — Socrates, Garibaldi, Joan of Arc, Jefferson, Pasteur, Florence Nightingale, Lincoln, Gandhi — all "dream-possessed," all loving something more than their lives and, paradoxically enough, all achieving immortality for themselves.

Not only the great identify themselves with causes and principles. Many an obscure "little man" has found the same kind of self-release and support in doing to capacity that which he believed good or right. The unpaid, unpublicized, unheralded neighborhood collector for Red Cross, Community Chest or Children's Aid finds real satisfaction in being part of an idealistic movement. Such satisfaction is on the highest level of pleasure, higher than gratification of physical desires or self-centered ego demands.

SECOND ONLY to desire for food is the sex drive. Both desires have been elaborated and complicated to include all sorts of secondary wishes and satisfactions; but they both remain basically physiological in nature. By most persons in most situations the desire for food is considered "respectable." Not so with sex. The whole problem has been poorly understood, inadequately solved. Calling names never solved anything. To label as sinful, wicked, forbidden, does not change physiological demands. It can and does create guilt feelings, which in turn give rise to many other pains.

In addition to all the moralistic taboos concerning sex satisfaction there is the inescapable economic one. For many years a child is physically, economically and emotionally dependent on someone capable of "tending" him. Physical sex desires develop long before there is comparable economic self-reliance; i.e., adolescents have normal sex impulses, desires and drives long before they are economically able to support a family. Many of the taboos that have needlessly complicated and distorted the entire problem of sex originated, no doubt, in an attempt to protect the young, to insure that there not be children until there is some assurance they will be cared for, protected. Such assurance is necessary, but too often the necessity has been implemented by fears, threats, lies. Conflict is inevitable when there is constant pulling between two powerful forces — between urgent, physiological desire and social insistence that the desire is wrong, evil, wicked.

The sex drive is as natural as desire for food. Gratification of either is pleasure-giving; frustration of either is painful. To persist, man must eat; to continue, the race must copulate. Sex is elemental, natural, good — and potentially beautiful — though it ceases to be good when it is given disproportionate emphasis, it is expressive of conflict or when its expression becomes little more than a mechanism for the release of tension that is nonsexual in origin or nature.

SEX IS NOT the whole of life, or even the most important part, but it is basic. Overemphasis is bad; underemphasis is bad — extremes are always bad. Gluttony, as well as asceticism, shows abnormal preoccupation with the demands of the body, whether for food or sex. It is important to remember that one who devotes excessive thought to the evils, ugliness or depravity of sex is as abnormally preoccupied as the one who dwells constantly on its delights. Such undue emphasis occurring in the presence of starvation is both understandable and deplorable. Only the man who has never been hungry can take a superior attitude toward the bodily demand for food. No sane man feels guilty to admit he is hungry, or depraved when he has eaten. He may have difficulty getting the food, but he is not shamed by society for either his hunger or his gratification.

The sex picture is more complicated. Not only are there inhibitions and frustrations of sex expression, but the existence of such prohibitions creates additional trouble. The minute anything is forbidden or made inaccessible, it becomes doubly desirable. Taboos about sex expression have been carried to the extreme of including speech. "Nice persons don't even think, let alone speak, of such things."

What started as mild, general curiosity becomes focused and intense. The greater the shame and secrecy, the more intense the curiosity, the more attention is riveted on the subject. The child here as elsewhere accepts his elders' verdict and, as a consequence, suffers because he is "wicked," "vile" or "dirty." But accepting condemnation or feeling guilt does not destroy physiological needs or curiosity. Punishments and threats may be sufficiently severe to prevent any overt expression of desires, but they also prevent his developing understanding of his own nature with a consequent balanced attitude toward sex. Ignorance does not connote innocence, and prudery should not be confused with purity.

There is a whole constellation of vicarious sex-pleasure mechanisms, ranging from conversational preoccupation to the pathological extremes of exhibitionism and voyeurism.

MANY PERSONS "take it out in talk." It is amazing how much so-called "polite" conversation is focused directly or indirectly on sex: jokes, gossip, the endless reworking of the salacious details of some public divorce or the revolting minutiæ of some sex crime. The more "shocking" the details, the more avid the audience. Some quite frankly enjoy all the "juicy" bits; others waggle their heads in horrified disapproval – but do not leave the room or put aside the paper. Their vocalized distaste demonstrates hearty disapproval of such "goings-on," but their refusal to miss one word is the real demonstration of how fascinating they find the subject. Such conversational devotion may indicate frustration, youthful repression or both. It ought, however, to be fairly obvious that such verbal preoccupation is as much a pleasure-substitute mechanism as is the talk of little children about candy trees or rivers of soda pop or the talk of ration-fed men who derive tortured pleasure from recalling or anticipating three-inch steaks.

It is amazing how many chronological adults react emotionally – with ill-concealed delight, pleased horror, embarrassment or revulsion – to the "dirty words" for using which they were punished in childhood. Sex, intrinsically, is no more disgusting that eating, but no man would feel "emancipated" or daring to use the word "grub" and no woman "insulted" if told a story about victuals. No one is urging more extensive use of gutter language but rather realization that a natural process has been converted into something slimy, that a basic physiologic drive has been distorted so that it is almost impossible for the average person to be objective, to think about one of the most powerful of all human drives, without being dirty-minded or – what is as unwarranted – stickily sentimental . . .

Another vicarious sex-pleasure mechanism is found in pornographic literature and art – by those who read avidly and those who, no less assiduously, leaf and thumb in order to condemn. Those who smack their lips and get some attenuated sex thrill from reading salacious books or contemplating pornographic pictures are hardly less mature or more abnormal than those who are forever feverishly hunting new manifestations of indecency. In a way, the latter are worse off because their inhibitions are so strong they have to fool themselves into believing their motives are quite other than they really are. Burlesques are a crude example of both the appalling poverty of human imagination and the distortion of the perfectly healthy and normal matter of sexual stimulation. They are a worse spectacle – at least the audience is – than would be the sight of hungry men sneaking into a library to drool over cookbook recipes. Such substitute sex pleasures, if excessive, may lead to the abnormal mechanism called "voyeurism," in which a person actually derives more pleasure from "looking" than from direct experience. So strong was the hold of the inhibitions and taboos that met his earliest sex curiosity, questions or experience that his guilt feelings interfere with normal, healthy sex attitudes or actions. The still-present desire leads to substitute mechanisms.

LIKE VOYEURISM, exhibitionism has many gradations. When it has become so excessive as to be pathological, the person derives sex satisfaction from exposure – exhibition – of his sex organs. There are many milder forms of the same "perverted" impulse, perverted in that the actions are designed to stimulate sexual desire but not to fulfill it.

With varying degrees of awareness and deliberation, women – and men – display their sexual charms: by gesture, posture, walk, provocative dress – or lack of it. What Mother Nature did with bright plumage, gay spots, gaudy stripes, magnificent ruffs and special vocal abilities, Daughter of Eve has improved upon with the aid of cosmeticians, *couturiers*, modistes, *parfumeurs*, charm schools etc. (These aids cost more if they bear French titles; those on lower economic levels must get along with mere beauty parlors, drugstores and dressmakers.) The perfume may be blended "just for you" or come from the 10-cent store, but its purpose is the same: to make the wearer more alluring. (Let men remember padded shoulders, nipped-in waist lines, pomades and lotions!) For many this display is comparable to the elaborate and beautiful setting of a table – from which no food is served. Often the woman who is most flirtatious, most concerned that every male within her orbit be aware of her as a woman, is fundamentally frigid, unresponsive. She contents, if not satisfies, herself with preliminaries, overtures, preparations. That women should bedeck themselves for potential mating is no doubt as "natural" as for birds to dart and sing, and every male seems to "take to" strutting and crowing, whether barnyard chanticleer or city Casanova. As part of sex pleasure, such display is expected; if it is made an end rather than a means, it is at best the appetizer without the meal.

AS THE ENTIRE BODY prepares for food-getting and reflects successful attempts, so it builds up physiologic tension preparatory to sex satisfaction, tension which, if released, brings about a total sense of well-being. There is always some left-over tension, some unexpanded energy which the body has mobilized and then not used.

So accustomed are we to speak of "body" and "mind" as separate, independent entities that it is still difficult to realize that the human organism functions as a totality and does not make the distinctions the conscious mind can formulate. The body seeks to release tension as automatically as it mobilizes it, asking no questions, unable to discriminate and make choices as to when and how to operate. The result is that sometimes the outlet used is inappropriate.

The most obvious and direct ways to pleasure are eating and sex. Neurotic eating occurs when one eats not to satisfy physical hunger but as a kind of comfort for whatever else may be gnawing. Much obesity is on this neurotic basis, with the person eating more frequently than his physical needs or even desires require. How often one comforts a small child by giving him an ice cream cone, a piece of candy or a hunk of butter! The extra food does not put skin back on his knees or mend the broken toy, but it does comfort the child. In much the same way many an adult "comforts" himself.

Not only are substitute sex mechanisms used in place of direct satisfactions prohibited by the codes of society or inhibited by the person's inculcated attitudes toward sex; they may also be employed as self-comforting devices for totally unrelated disturbances or frustrations. Food is good; overeating is bad – whether the result be obesity of the body or fatty degeneration of the emotions. Many a sex-substitute mechanism not bad in itself becomes detrimental if used to excess. Persons whose own emotional lives are starved get vicarious, secondhand pleasure from reading romantic fiction and seeing sentimental movies. Harmless enough? Yes, except when carried to such extremes that the person's whole attitude toward life becomes so unrealistic that he is increasingly unable to adjust to actual experience and to find direct pleasures and satisfactions. Good bread, even without butter or jam, is more sustaining, more health-giving, more conducive to total well-being, than the most elaborate whipped-cream pastry only seen through the window. The big danger lies in the ease with which a person may continue to content himself with substitutes rather than expend the energy, ingenuity and faith necessary if one is to channel his desires in such a way as to achieve the greatest amount of direct pleasure for himself.

It ought by now to be clear that the mechanisms are closely interrelated in both essence and use. Rarely is one used exclusively. A person may by her speech and dress seek attention and obtain a diluted sex pleasure; another, in an effort to compensate for his "insignificance," may identify himself with a gang or a mob and from it derive at least the semblance of strength. Another complicating factor is the close relationship between pleasure and pain. About any one of the mechanisms, there could be lengthy and inconclusive arguments as to whether it represents seeking pleasure or avoiding pain.

The man who "compensates" is pursuing the pleasure of recognition and trying to escape the pain of being disregarded. The woman who finds pleasure through identification with an ideal cause is simultaneously escaping the pain of loneliness. The man or woman who "gets a thrill" from reading about the sexual prowess of others is not only getting substitute pleasure but also releasing tension built up through multitudinous painful frustrations. About all that can be said is that some mechanisms are directed primarily toward pleasure-getting and others are almost wholly concerned with pain-avoidance. Some mechanisms quite clearly serve in both roles; of those, the most frequently used are rationalization and fantasy.

Rationalization is a process of self-justification, of self-exculpation, by which one finds excuses for his actions, attitudes, ideas. The term is completely misleading, for "reason" has nothing to do with the process – quite the reverse.

Man prefers to be "right" even when he isn't, so he hastily and quite unconsciously thinks up alibis disguised as "reasons" and parades them in the hope of fooling himself and others into believing that he is entitled to whatever he wants, that his mistakes are not of his making and that whatever is his is somehow superior.

The minute "I" own anything it becomes precious – particularly if someone tries to take it away or demean it, particularly if "I" have had it "all my life." We identify ourselves with our possessions – material, intellectual, spiritual – whether ownership is by acquisition or inheritance. Challenge what a man considers *his* – be it his family, neighborhood dog, pronunciation, occupation or religion – and he "feels" it a challenge to *him*, a threat to his security, an attack on his pride, self-esteem, importance. *The first-personal pronoun is honorific.* The car that provoked my profane wrath becomes a marvel of performance and economy if scoffed at by another. The very child who has heard an unflattering recital of his shortcomings becomes a paragon if the neighbors complain. The church I neither attend nor support becomes the "true faith" if someone ridicules it.

Most things that a man "owns" represent no effort, choice or reflection – particularly his ideas, beliefs, ideals. It is easy to take the familiar for granted, and man will work hard to do the easy thing. Since change is disturbing, we tend to cherish form long after function has ceased and to maintain the customary, even though worthless, inconvenient or harmful. Criticism or opposition increases the ardor of defense. When challenged to produce "proof," "Well, everybody knows . . . ," followed by a host of hastily concocted "reasons" (rationalization) to substantiate the emotionally held belief.

These things are trivia, but the attitude of accepting the accustomed as sacred and immutable carries over to more important realms. Is it silly or reverent that a devout Catholic lifts his hat when passing a Catholic church? Is it silly or reverent that a devout Jew kisses a mezuzah when leaving his house? He will not eat pork on Friday; she will not on any day. In this place of worship all men remove their hats; in that, all men keep them on. The Chinese place rice cakes on the graves of their dead. How respectful is the Occidental with his: "Do they expect them to eat the cakes?" We place flowers on the graves of our dead. How respectful is the Oriental with his: "Do they expect them to smell the flowers?" Since "ours" is the true religion, it is right that we send missionaries far and wide. Yet many in an American university community were agitated and resentful when a Buddhist temple was established in their midst, though no attempts at conversion to that "true faith" were made. Superstitions – which ones? It depends almost wholly on the speaker. Rarely do we know much about the institutions or ideas we defend

most heatedly or condemn so heartily. In political or religious discussions there is usually more heat than light. The name of the heresy and the shape of the witch change, but the hunt is always on — to track, muzzle or destroy whoever expresses contrary convictions. It's easy to forget that real values do not disappear under scrutiny, that there's "nothing to fear but fear itself."

THE PULL of desires is strong, their voice insistent. Wish a thing strongly enough, and in time it is easy not only to believe it's all right to have it but even that one is really wholly unselfish in the pursuit.

Mrs. M does not admit that clothes constitute her cosmos and that she is wildly extravagant. Instead, she "owes it to her husband's position to keep up appearances."
Mr. C "sacrifices the pleasures of home to serve his country in a foreign land," writes wistful letters and sends charming gifts to his wife and children. He never admits that the idea of a family is far more enchanting than are the tiresome, irksome responsibilities of the ordinary husband-father.
In the meantime, Mrs. C is having a wonderful time dramatizing herself as a "brave little woman," a "wonderful wife willing to sacrifice her desires to her husband's interests." She writes charming letters, but not in them or anywhere else does she admit that her house and status are more to her than her husband's companionship, that she is delighted not to have to adjust any of her whims.
Professor K does not bluntly announce he prefers playing bridge to grading papers. Instead —"Entirely too much emphasis is given grades. The real value to the student is in writing the paper."

Rationalization gives us all such valid reasons for doing what we wish! It is painful to admit stupidities, selfishness, ignorance; if real admissions were made, change would be obligatory. It is much easier to *rationalize:* make excuses, exonerate ourselves; blame others and disguise the ugliness:

Ill temper becomes "righteous indignation." Stinginess becomes "conviction that charity encourages laziness."
Favoring the best-loved child is not partiality but "teaching the others they must not be selfish."
Giving assent through silence is not cravenhearted fear of ridicule or opposition; it's "respect for the opinions of others" or "sad realization that protest accomplishes nothing."
Refusing to see an ill or sorrowing person is not saving oneself from emotional disturbance but "respect for privacy," sensitive "unwillingness to intrude."
Cutthroat competition and shoddy practices are "good business."
No company pays starvation wages; it "protects the stockholders."
No powerful nation bleeds a smaller one; it "protects," assumes "the white man's burden," "shares the benefits of Western civilization."

Anyone who remembers how ardently he wants what he wants and how eager he is to be "right" in the estimation of others and himself can easily understand the prevalence of rationalization — that convenient mechanism that disguises excuses as reasons, furnishes alibis and obviates the difficulty and the pain of changing. It is difficult to detect, let alone eradicate, rationalization. Unconsciously we wrench facts to fit our desires or fears. The quality of primary certitude about what one has always accepted as being true makes new interpretations exceedingly difficult. Wishes and fears are wily advocates and furnish countless apparent proofs, so that it's easy actually to believe one is thinking through to rational conclusions — when all that is happening is the marshaling of spurious excuses for past or present performance.

In fantasy, one retreats to an imaginary dreamworld — where he can achieve elusive and unattained pleasures or escape pains experienced in reality or feeling.

For the small child there is no sharp separation between the prosaic world of actuality and that which exists in his imagination alone, and he moves with complete ease from one world to the other. He *is* the things and persons he plays at being, and he requires no stage properties. Daddy needs only willing back muscles to become a highly satisfactory horse. This complete merging of the imagined and the actual does not last long, and "being" changes to "playing at." A 4-year-old will be the wind: puffing his cheeks, waving his arms and making noises; but a 7-year-old will say, "Aw, that's silly." He will, however, play at being a pirate, king, gangster or anything else that fits his notion of himself. Such imaginative "play-acting" is common and entirely normal. Lonely children often talk and play with an imaginary playmate, and it is interesting to note how often this companion is a kind of scapegoat.

This normal fancying or imagining is quite different from that resulting from inability to escape distressing actualities or obtain much-desired pleasures. The former is creative; the latter, negative; the one, part of experience; the other, apart from life.

SELF-DRAMATIZATION is universal. Everyone would like to be better, stronger, prettier, more popular, more intelligent, more capable, more something. Every scrub team member dreams of being called in — preferably during the last minute of the last quarter — and making the saving touchdown. Every girl dreams of being the beauty queen.

Their elders enjoy the same kind of ego-inflating exercises: the crushing retort delivered at the right moment, the mock-modest acceptance of honor, being in superlative degree what is most admired. Daydreams can be of inestimable value, but when they replace action, they are enervating, debilitating and, in extreme instances, destructive. The schizophrenic has made his fantasy so vivid that he actually loses touch with the everyday world, even becoming unaware of physical pain.

The world is lost without dreams and dreamers — but these are potent only when they become deeds and doers. Usually the person who overindulges in fantasy is only unrolling an endless film of self-flattering pictures. The world's work and his own concern him little.

Fantasy does not always present such a pleasant world. Often the very pains one would escape are multiplied a thousandfold in nightmare fashion, with one "living through" difficult, distressing, ego-wounding or physically dangerous situations that "might happen." In the acute states of schizophrenia much of the fantasy is exceedingly painful, with delusions of persecution: secret enemies at work, electric charges and gas being sent through the body or pumped into the room. Pleasant or unpleasant, the world of fantasy is unreal, and thus fantasy cannot be ultimately satisfying, since at best it can give only the illusion of pleasure or escape from pain. ◆

FEAR and ANXIETY

by Ernest R. Hilgard

EMOTIONAL STATES are aroused states. If the emotional state is an unpleasant one, the organism seeks to terminate it. This unpleasant emotional state corresponds to the tension state in aroused drive. The organism, if frightened, tries to escape exactly as it attempts to escape from pain. The person with fear of high places will learn to avoid such places or, if he finds himself on a height, will be restless until he gets away. Reduction of the tension aroused in unpleasant emotion is like the reduction of drive-tension.

Once a fear is acquired, it leads to strong avoidance of those situations in which the feared object or event is likely to appear. Fear motivates the organism both to escape from the feared object and to avoid contact with it. The feared object thus acquires negative volency. Extreme or pathological fears, known as "phobias," importantly affect the conduct of those who suffer from them. The fears may be of high places, closed spaces, open spaces, animals, dirt or diseases. The list is, of course, not complete: Almost anything can become the object of a phobia. A striking case history of such a phobia is given by William Ellery Leonard, poet and professor of English at the University of Wisconsin, in his autobiography, *The Locomotive God*. His fear of a locomotive, based on a childhood incident, led to fear of leaving home, until he practically imprisoned himself in it. He dared go only a short distance away. Fear was for him a very powerful motive greatly affecting his movements and hence the very course of his life.

Anxiety is a state closely related to fear and, like fear, has motivational consequences. The vocabulary of emotion, having come from the language of ordinary life and of literature, lacks scientific precision. "Anxiety" is a word in this vocabulary, and psychologists are not consistent in the way they use it. We shall consider three meanings that psychologists have given to "anxiety."

Anxiety is first of all a state of apprehension, of concern, of uneasiness. It is closely related to fear, but it is fear with a vague object or with no object at all. One use of anxiety is, then, to mean a *vague fear*.

A second use of anxiety restricts it to a limited kind of vague fear: the *fear of insecurity*. According to the conception on which the use is based, anxiety is social in its origin, beginning in infancy while the child is dependent upon the adults who care for him. Deprivation, neglect and loss of affection arouse the feelings of insecurity that the infant comes to fear. This fear of insecurity is considered the basic anxiety, and it is a fear in which other people always enter. What is feared is isolation, lack of affectionate responses by other people. When anxiety is used with this meaning, it is distinguished from fear: *Things* can cause fear; only *people* can cause anxiety.

Anxiety is used in a third way to mean *concern over our own conduct*, i.e., feelings of guilt. We are uneasy lest forbidden impulses be exposed or a past misdemeanor uncovered, for then we would feel guilty about them. Children, for example, are often resentful of parental authority yet have learned to show love and respect for their parents. Fear of blurting out their hidden resentments may be a source of anxiety. The adolescent may fear to reveal his intensified interest in sex. Fear of being afraid or of showing fear may give rise to anxiety, especially if the accepted code (as in some military groups) is to appear fearless. Anxiety about our own feelings is undoubtedly one important form anxiety takes.

These three conceptions of anxiety are not mutually exclusive. We may accept anxiety as meaning vague fears, fear of insecurity and fear of behaving in guilt-producing ways. As a result of one or more of these fears, many people find themselves frequently in a state of anxiety.

A state of anxiety, like that of fear, is an unpleasant state, a tension state from which we yearn to escape. Hence anxiety, too, can be considered a drive. An individual is commonly made to conform to social expectations by threats to his security; i.e., the threats make him anxious if he does not conform. If he breaks the law, he may be punished by a fine or by imprisonment. Society hopes that the punishment will not only control his conduct in the future but will also stand as a warning to others, intensifying their anxieties if they violate the code.

Some religions use the threat of divine vengeance against those who sin. The appeal to conscience, to a personal sense of guilt, is a more powerful anxiety-producer for some people than threats by external authority. It may be possible to escape the eye of the policeman, but it is difficult to escape the watchful eye of your own conscience. Not all nonconformity is serious enough to require punishment, but the nonconformer may find himself teased or ridiculed. Ridicule puts him apart, makes him feel ostracized, and so arouses anxiety about his status and puts pressure upon him to behave like those about him.

Behavior regulated by punishment is regulated chiefly by the *threat* of punishment. Anxiety is the real drive that operates for most people in a situation in which punishment is threatened. They conform, do what is expected of them, in order to avoid feeling anxious lest they be punished. The total amount of actual punishment in our legally regulated society is very small, even though the threat of punishment exists. Few people are forcibly evicted from theaters, even though a policeman stands at the door.

The important fact is that enforcement of many commonly accepted and approved social practices is aided by the threat of anxiety. External controls become internalized in the form of conscience, so that the person feels more comfortable when he behaves in the way he and society think he should. The thought of behaving otherwise makes him feel guilty and arouses his anxiety. Because anxiety is unpleasant, one tends to avoid it; i.e., he tends to behave most often in accordance with the dictates of his conscience. ♦

The NEUROTIC TYPE

by Karl A. Menninger

THE WORD "NEUROTIC" is fairly familiar to most intelligent people, but it is variously interpreted. For many it is a dignified synonym for "nervous." Some people consider it something of a distinction to describe themselves as neurotic. For others, particularly doctors, it is a word of opprobrium describing those individuals whose propensities for complaining outdistance all conceivable degrees of actual physical disease and who cry their symptoms to high heaven in spite of the flimsiest evidence of organic trouble.

In truth, the neurotic is both of these, neither of them and much more in addition. Theoretically the neurotic patients are those whose childhood development was such that the conflicts between their instinctive tendencies and the environment were never resolved in a way wholly satisfactory to the ego and who are, therefore, constantly impelled to indulge in behavior which gives them a needed satisfaction at an exorbitant cost. The neurotic is one who always contrives to defeat his own aims, to spike his own guns, to lay his own pitfalls. He does this by treating persons and situations of 1957 as if they were the persons and situations of 1923, the period of his childhood. He suffers, as Freud says, from "reminiscences" — unrecognized ones. The gratifications he obtains are usually so disguised, so unsubstantial, so costly, that healthy-minded people cannot understand or believe that the neurotic patient is actually the victim of an illness (more correctly, of a personality defect).

Hysteria, which is the typical neurosis, comes from a Greek word for "womb." It is very interesting to note that several thousand years ago, when the word was coined, it was recognized in some way or other that there was some connection between it (and all the neuroses) and the sexual instinct. The first theory of this was that the womb *(votépa, hyster)* got loose from its moorings in some way or other and wandered about over the body and thereby produced symptoms in this or that region, according to where it maliciously nestled. This very well symbolizes the modern view that the neuroses are essentially a displacement, not of the womb, but of the sexual instinct — or, rather, of the outlets for the sexual instinct. The neurotic personality is one whose primitive instincts (sexual and aggressive) have been modified to meet social requirements only with painful difficulty and with the development of numerous disadvantageous substitutions.

Civilization has immensely elaborated the opportunities, the fruitfulness and the significance of sex, and it has also greatly increased the difficulties of achieving its ends. In the days of our primitive ancestors, in all likelihood, a man who felt so inclined simply sought a woman for mating purposes — as any of the quadrupeds do today. He may have had to do some fighting to get her but no more than that. Today there are multitudes of obstacles to be overcome before a man may marry a maid, and great responsibilities devolve upon him once he has taken the step.

This increase in the complexity of the expenditure of sexual instinct is only half of it; civilization has also greatly increased the opportunities for the development of the individual's self-expression aside from his physical propensities. For primitive man, life was a matter of eating, sleeping, hunting, fighting and procreating. Life today has infinitely more diversions.

And it will be seen upon a little reflection that this elaboration of interests and forms of self-expression which we call civilization could have been possible only at the expense of the simple, easy, direct self-satisfaction methods of primitive life. It is only when resistance is placed in the course of an electric current that heat and light are developed. And it was only by the imposition of certain repressions that the interests of mankind became extended to their present and ever increasing range. In other words, civilization and culture owe their existence to the thwarting of primitive tendencies, particularly the sexual and aggressive instincts, and in this sense *civilization itself is a neurotic product.*

IT IS NOT REMARKABLE, considering how recently we have arrived from the stage of simplicity just described, that many of us should have difficulties in adapting our instincts to the elaborate code of 20th century civilization. This is characteristically true of the neurotic personality. He wants to have his cake and eat it. He wants to reap the fruits of culture, but he also wants to retain more primitive forms of satisfaction.

As I have written this, it is altogether too simple. For it is too easy to say that the neurotic is vacillating between culture and animalism. Rather it should be said that the neurotic is confused and torn and distraught among a variety of opportunities. He is not defective or moody or withdrawn; he is thwarted. His unconscious mind is the scene of a terrific battle between unreconciled tendencies and opposing trends.

This battle goes on in the unconscious of every person, but in the neurotic personality it is closer to the surface of consciousness; the sides are more evenly matched; the fray is bloodier. For the "normal" person it is quickly, quietly, painlessly settled one way or the other. He eats his cake, or he has it. He kisses the girl, or he lets her go. He likes poetry, or he doesn't like it. But the neurotic can't decide. He appears to want one thing and to do the other. He seems to create obstacles for himself and to stumble over his own feet.

BUT THE NORMAL man or woman *does* find someone to love and in the course of defending such a love probably finds someone to hate and does both with a net result of success and happiness. The difficulties of the neurotic man or woman in accomplishing this may take the form of *flight* or of *attack;* some men fight the wives and sweethearts whom they think they love or should love and surrender themselves amiably to men or women who do them harm. Some take flight into

physical illness, others, into fears or absorption with their nervous indigestion and constipation, others, into a preoccupation with physical culture and athletics or even art, music and literature. These things are not forbidden to anyone, because no one living under civilized conditions can expend all of his instincts in a direct, undisguised way.

Some individuals, however, unnecessarily and unintentionally surrender *all* direct sexuality and all conscious sexual feeling. Medically such conditions are known as *impotence* in men and *frigidity* in women. Women especially are subject to this affliction and frequently believe that it is physical in origin (which it never is) or that women "are not supposed" to have conscious sexual feelings (which is absurd). These people are not lacking in sexuality; they are merely under the spell of intense repression, which, I cannot overemphasize, does not mean *suppression*. They are inhibited by too much civilization, a special private civilization of their own, which is not fruitful and which is a caricature or an exaggeration of real civilization. The fact that a mother prohibits all sexual activities in a boy when he is 8 is no reason for his maintaining the same abstinence when he is 30, but this logic often prevails in the unconscious, nevertheless, and prevents such a man from marrying or from being a good husband when he does marry. The same is true of women.

INHIBITIONS IN SEXUAL LIFE are often explained away and ascribed to idealism, lack of opportunity, physical abnormality, glandular inadequacy or incompatible companions. People are sometimes encouraged in this by conscientious but misinformed physicians. Such explanations are more comfortable, but leading urologists and psychiatrists now agree that usually they are false and the condition is a psychological one which requires psychological treatment.

I have gone into this at some length because such afflictions are so typical of the neurotic personality; i.e., he thwarts his own instincts. Sometimes he thwarts his own instincts voluntarily and too much. To some extent he substitutes neurotic symptoms for these gratifications. The symptom acts as an excuse, and it also acts as a vehicle for expression of physical sensation and of bodily interest which should be expended in a more fertile direction, either in direct sexual expression or in a *sublimation* of direct sexual expression. If, instead of dyspepsia, this man would make poetry his outlet – his bride, so to speak – the world would be better off and he would be much more comfortable. He could still be described as having a neurotic personality but not a neurosis. A man with nervous indigestion, however, has a neurosis.

COMPROMISES of a sort valuable to society are called *sublimations*, and it is upon sublimations that culture depends. To repeat the formula in a simple way, sexual instinct must in the nature of things be more or less thwarted. If this thwarting or frustration is followed by the turning of the energy into an unproductive channel, the individual is said to have a neurosis. If it is deflected into a productive channel, he is said to be sublimating. The schoolteacher and the nurse represent simple forms of sublimation of their maternal instincts. The artist and the author are creators in no less definite a sense than the famous Austrian who was the fath of 43 children. The fact that the surgeon, the lawyer, t actress and the minister are afforded opportunities for su limation by their professions is a little less obvious until o remembers that sexual instinct involves many more tendenc than merely that of possessing a person of the opposite sex a procreating children therewith. Sexual emotions may ta many forms.

I KNOW OF A CLUB composed of distinguished and accom plished men. There are a bank president, the manager of corporation, some lawyers and doctors, an editor or t authors, journalists, businessmen. They are intelligent; th are educated. Their conversation is brilliant. They are t wise men of their community, the advisers and counselo the strong, sane men. Some of them give evidences of p sessing, in addition to their high degree of culture, neuro personalities. None of them can be said to be an out-and-o neurotic. Any of them might easily become one.

Look closely at one of our friends. He is so kind and honest that he would certainly not deceive anyone in t world. He is amiable, soft-voiced and gentle, and yet he i lawyer famous for his fierce and courageous fighting in t courtroom. But he allows himself to be tyrannized by a ha bitter, selfish, relentless wife who gives him no peace, from whom he is powerless to escape.

Here is another one: He is immensely fond of his wife a devoted to his children but perfectly incapable of resist any attractive woman. Time after time he is dragged out messes by the heels, and only the extraordinary forbearan of a remarkable wife has saved him from the ruin that h desertion would certainly mean to him.

That newspaperman over there who knows so much ab almost everything is interested in nothing else so much that about which he knows the least – namely, medical s ence. His own health is by far the most important topic the world. He is alarmed at rainy weather on account the possibility of colds; he believes that dry weather is lik to promote epidemics. He fears cold weather on account pneumonia, hot weather on account of heat strokes. He h a propensity for wearing rubbers and heavy underwear. He anxious about his food and suspicious of it. He eats far much and immediately regrets it. He has never been sick his life, but he is always expecting to be imminently . . .

THEORETICALLY, all of the neuroses are completely cura Practically, the cure is sometimes easy and sometimes possible. Always it must be remembered that the neurot escaping conflict and expressing his wishes by his sympt – that these symptoms represent the compromise necessa arrived at as a result of terrific unconscious struggles he along by certain external considerations, irritations and cipitations. Fifty percent or more of the people who go doctors to be healed of their sicknesses are suffering f neuroses. Most of them can be helped – many of them, cu Many others would not under any circumstances dare to mit themselves to be cured. They live only by the grac their symptoms. ◆

MOODY PERSONALITIES

by Karl A. Menninger

MOODINESS PREDISPOSES TO FAILURE only when it becomes extreme. There are moods and moods, but the characteristic ones center about the two poles of gaiety and sadness. Instead of the environment provoking the emotional reaction, moody people seem to arrive independently at a state of gloom or elation, and it determines their behavior. Frequently it is an alternation between the two extremes. "I'm on top of the world one week and down in the depths the next," people often complain. "One week I can do anything and get lots accomplished, then during my depression everything slumps."

This is typical. The pendulum action has been a familiar phenomenon to students of the mind for thousands of years. It was noticed in the time of Hippocrates, several hundred years before Christ. Presumably Saul suffered so. Domination by emotional extremes and the cyclic alternation of moods characterizes one great group of personalities, the "moody" we will call them, and a corresponding group of mental illnesses, the cyclothymias or manic-depressive psychoses . . .

The moody personality type may be predominantly gay, gloomy, irascible or alternating. Those prevalently gay are apt to be highly distractible but carefree and self-confident, given to jests, chatting, pranks, sports. They are very approachable and communicative, though often overbearing, arbitrary, impatient and even belligerent. They are quick and animated, talk readily, easily and abundantly and often write in the same way. Their brilliancy and alertness, their versatility, their multiplicity of ideas, their kindheartedness and sunny dispositions, are likely to make them many friends in spite of their faults. They are always prone, however, to depressions, just as the depressed types occasionally experience periods of elation.

Typically, the chronically moody person of the depressed sort takes life seriously; he takes things hard and sees the dark side of things. Life seems to him more or less of a burden. Each task seems gigantic. He bears, with conscientious self-denial, obligations of life without any of the pleasure of living. He usually becomes anxious and despondent, feels useless and unfit. He lacks self-confidence and decision and seeks the advice of others on the slightest occasion. He is prone to have physical complaints and anxieties.

The oscillating type of moody personality swings back and forth between the two extremes, today lively, sparkling and radiant; tomorrow depressed, listless and dejected.

The hotheads, who carry to extreme the emotion of anger, are still another variety. They are strongly affected by everything, often unpleasantly. Every little thing offends them, or at least they are apt to become offended at some little thing and pass over much bigger things. A slight provocation will be sufficient to produce rage and storming, sometimes outbursts of cruelty and retaliation. There are likely to be violent scenes etc. . . These individuals are ordinarily serene, self-confident, self-assertive — but ill-controlled and subject to attacks of sullenness, crossness, unhappiness and excitement . . .

It is likely to be forgotten by the healthy-minded person that the moody man's ideas are dictated by his moods and feelings, because we ordinarily assume the reverse. Even the patient's disparaging description of himself is oftentimes largely correct, because, as Freud remarks of the melancholiac:

> *"When in his exacerbation of self-criticism he describes himself as petty, egoistic, dishonest, lacking in independence, one whose sole aim has been to hide the weaknesses of his own nature, for all we know it may be that he has come very near to self-knowledge. We only wonder why a man must become ill before he can discover truth of this kind."* . . .

Fortunately for the world, Abraham Lincoln, characteristically a moody personality type, was actually saved from wretched failure by the intelligence and decisiveness of his friends. This is an aspect of the life of Lincoln which many persons do not know, although it is recorded by most of his biographers. After the death of Ann Rutledge he was incapacitated for months with melancholia. Again, in 1841, he was plunged into so deep a depression that he was taken by his friends into guarded seclusion at the advice of physicians, and all knives and dangerous instruments were removed from his reach. He is quoted as saying that he was the most miserable man living.

Nor were his friends too sanguine. His law partner, Stuart, described him as a "hopeless victim of melancholy." His future wife's relatives frankly considered him "insane." A specialist in Cincinnati was consulted, although Lincoln found most relief from confiding in his friend Dr. Henry, who, he said, was necessary to his existence. He himself called his affliction hypochondriasis, but it was assuredly more than that. It was typical melancholia. . . .

Melancholia moods are familiar to all. Such poets as Poe, Thomson ("The City of Dreadful Night") and Robinson have verbalized them, and Chopin, Tchaikovsky, Sibelius and others have put them into music. But the mood may grow stronger than the man, and more frequently than not it is expressed in futile tears and groans instead of melodies and verses.

In what respect does melancholia differ from the blues with which we are all familiar? Chiefly in degree and in direction. Usually, also, the blues depend to a greater extent than real melancholia on some external event — a loss, disappointment, frustration, physical illness or the like.

But the melancholy man is usually unconscious of the real reason of his sadness and invents false reasons which he believes. His sadness gets worse rather than better with the passage of time. Environmental factors are of relatively little importance; they may contribute to it and may precipitate it, but they only mask the real buried causes. The loss of a love object causes all of us grief and but few of us melancholia. For the *grieving* person the ego is unaffected; it is the outside world that is poor by reason of the loss. For the *melancholy* person the outside world is good enough; it is the ego that is destitute. ♦

WORRY and TENSION

by Laurance Frederic Shaffer

ORDINARY WORRY is the most frequent of nonadjusted responses. It differs only in degree from the anxiety states, but this distinction is a great one, for almost everyone worries to some extent yet is able to achieve a passable kind of life adjustment. Worry typically concerns more specific problems than does anxiety and is less continuous, disappearing when the simple causal factor is removed. In worry the random nonadjustive behavior of the individual is chiefly *verbal* in character. This takes the form of a continued contemplation of the problem at hand. The worrier thinks over his predicament again and again but not constructively.

Worry typically concerns a past or an unchangeable act about which it seems impossible to do anything. It is an ineffective form of trial and error and therefore an activity response to a stimulus. Worry has often been described as caused by the necessity of doing something about a problem about which nothing really useful can be done. At times the worrier will speak his meditations aloud and derive some tension reduction from telling them to others, but the speech is *im*plicit rather than *ex*plicit. Worry involves a "circular reaction" that aggravates the persistent nonadjustive state. The original situation arouses emotion and verbal activity together; hence, by the ordinary process of simultaneous learning, the verbal component becomes a substitute stimulus for fear. Thus fear arouses worry, and worry arouses more fear, the physiological state of emotion being constantly stimulated anew. The visceral states act, as in neurasthenia and anxiety, to impede digestion and may result, in chronic cases, in the individual's "worrying himself thin."

In most worries the situation to which the individual vainly seeks adjustment is not an external one but is a problem of personal inadequacy. Since an attitude of inferiority implies the recognition of inability to adjust, the presence of worry in such cases is not unexpected. Even in persons who have acquired defense mechanisms, periods of worry usually alternate with those of overaggressiveness. The problems most often worried about are those which persons are most likely to meet without adequate preparation. Worries which concern the choice of a vocation or success in it, those which relate to social adjustments and worries about sex problems are probably those found most frequently among adolescents and young adults.

Worry often involves repression – in the form of an inhibition against seeking advice in regard to the subject of anxiety. If an individual has to adjust to a personal problem that he feels to be shameful or to which he attaches a fear of social disapproval, he may fail to obtain assistance to supplement his own inadequate ability to deal with it. The fear of insanity offers a good example of this. Uninformed persons frequently have strange notions about mental disease, particularly in regard to its inheritance. If they repress the thought of impending insanity and hence fail to seek advice from competent persons, an unnecessary anxiety may haunt them. Reassurance and education usually remove a simple fear of this type without much trouble.

A more thorough type of repression than the mere inhibition against seeking advice operates in some cases. A number of persons are chronic worriers. They do not confine their worry to any specific issue but worry indiscriminately about any possible problem. Some of these cases are due to a habit of worry (starting with some really important difficulty) that becomes established and is employed thereafter in many inappropriate situations. In other cases, worry over a trivial matter is a substitute for fear having some more fundamental basis, the recognition of which is prevented by repression. In such instances treatment is difficult. To argue against the present trifling worries is futile; even to do away with them is not permanently effective. The repression that acts in relation to the real underlying problem must be removed, and it is necessary to have the patient thoroughly readjusted to the original strong fear-producing situation.

Since worry is a very common human problem, some practical hints concerning the treatment of ordinary worries will not be out of place. These procedures will not cure all cases but their performance will relieve many of the less severe worries so frequently encountered by nearly everyone.

(1) Set a time for the consideration of the problem. One of the chief aggravating factors in worry is the tendency to put off painful acts or unpleasant thoughts. Meanwhile the tension remains unreduced. (2) Confide in someone, confess all about the worry and talk it out. Fears which seem great when considered in solitary contemplation often become trivial when discussed with an impartial observer. (3) Get advice and seek assistance. Many worries are due to inadequate information concerning a problem or to the inability of the worrier to discover a good solution. Someone who knows more may be able to help.

(4) Evaluate the cause of the worry. If the anxiety is over a minor affair and the emotion is too great for such a cause, it may be due to some other fear for which the present stimulus is a substitute. The discovery of the underlying causes can sometimes be accomplished alone or with lay advice, but the assistance of a psychiatrist or psychologist is valuable. (5) Do something active about the causes of the worry. In worries concerning school marks, a good session of study is tension-reducing, even though it may not completely solve the problem. In social worries, participation in any social activity will help to relieve the fear.

(6) If it is impossible really to remedy the situation worried about, the development of *balancing factors* of a socially acceptable nature is desirable. Balancing factors are activities such as hobbies, sports, social activities etc. which give temporary tension reduction in times of emotional stress. These interests assist the individual in returning to normal emotional tone, after which another attack on the worry-producing problems may be more effective. ♦

EMOTIONAL CONTROL

by Wendell W. Cruze

THE RESULTS of the studies in the field of psychosomatic medicine have served to emphasize the importance of the emotions in physical health. Psychologists and psychiatrists have long been aware of the importance of emotions in the field of mental health. In their clinical practice they are constantly meeting people who come to them seeking assistance in solving personal problems. These people are troubled by uncontrollable tempers, irrational fears, persistent jealousy or a multitude of anxieties and worries. Usually they expect the psychologist or psychiatrist to provide them with a magical formula or powerful secret which will give them immediate relief from their problems. They are doomed to disappointment. There is no marvelous cure-all for emotional instability, no short cut to physical and mental health.

The developmental history of the individual, beginning in early childhood and continuing to maturity, will usually provide the facts necessary for understanding his emotional tendencies. And we must realize that these emotional tendencies, the result of years of training and experience, cannot be changed overnight or even in a few weeks or months. The best place to start training for emotional control is in early childhood. We must realize that emotional habits are built up in much the same manner as other habits. We must keep in mind that, although the internal reactions involved in emotion vary only in intensity, the stimuli that will call forth emotional reactions and the type of external reactions that will be made in these situations are very largely the result of training or conditioning.

We fear certain objects or situations because we have learned to fear them, and we become angry in certain situations because we have learned that this is the appropriate response to make. If we show fear or anger too frequently, it is because of the training we have received. If parents and teachers were to plan for training in emotional control with the same skill and enthusiasm that they show for the development of skill in reading and other academic areas, the clinical psychologist and psychiatrist would find their work much easier.

THESE GENERAL STATEMENTS with reference to the development of emotional tendencies during childhood have little practical value for the college student or adult who is looking for assistance in emotional control. For these people we shall offer a few practical suggestions and repeat the warning that control cannot be established in a few hours or days. Consistent effort over a long period of time will be necessary before definite improvement may be expected.

1. *Learn as much as you can about emotions.* Our public schools have been quick to include instruction in physical hygiene in their courses of study but rather reluctant to include anything in the field of mental hygiene. Certainly the high school student is mature enough to master the fundamentals of emotional phenomena, and it is absurd to believe that he will be better off if he remains ignorant in this area. No subject could be of more immediate practical value, for this information would assist high school and college students with their everyday problems of adjustment. The individual who is well informed concerning the causes, reactions involved and consequences of emotional activity will be in a better position to control his emotions than the person who knows little or nothing about these phenomena.

2. *Avoid emergency situations.* Emotions are emergency responses made when an individual does not have an appropriate response of a rational type ready to use to solve the problem he faces. The emotionally stable individual plans for the future. He acquires responses that he can use when he faces relatively unimportant situations. He does not allow these situations to develop into emergencies. Furthermore, he plans his activities carefully so that he will be able to avoid meeting people and situations which he knows will probably result in emotional tensions. Learning to avoid as many emergency situations as possible is an essential part of every program of training for emotional control.

3. *Learn to control external expression of emotion.* It is well to keep in mind that the external muscles involved in emotions are subject to voluntary control even though the visceral responses are not. The man or woman who has learned to keep a "poker face" during emotional tension has made decided progress in the battle for control of the emotions. Not only do these external responses tend to increase the intensity of the emotional experience; they also excite other people and encourage them to become emotional. If these people, in turn, allow themselves to show emotion, their emotional expressions will stimulate the first person to further emotional excitement. In this way a vicious circle of emotional reactions may be established.

4. *Work is an excellent antidote for emotion.* The person who is busily engaged in some interesting activity will not have the time or inclination to indulge in emotional sprees. If you feel depressed or apprehensive, or if you are filled with anger and resentment at some real or imaginary slight, the surest way of dispelling your depression, apprehension or anger is to become busily engaged in some activity that will tend to distract your attention from the emotion-provoking experience and at the same time use up some of the surplus energy that has been made available by the emotional reaction. Whistle when you are afraid and run around the block when you are angry. Devote your attention to these or other activities, and relief from the tensions produced by the emotion will be forthcoming.

5. *A sense of humor will save many difficult situations.* The person who has a sense of humor will be able to avoid many emotional experiences. Try to develop a sense of humor by looking for the humorous or ridiculous elements in situations that are apparently going to be serious or trying. ♦

PERSONAL MATURITY

by Allan Fromme

A REALISTIC UNDERSTANDING of happiness cannot exceed our understanding of man himself, and the proper subject matter for the study of happiness is simply the study of man. Thus everything we can say about his emotional maturity and good adjustment is, essentially, what can best be said about happiness.

The evaluation of our emotional health requires a knowledge of the signs of good adjustment. By the time we are old enough to do something about ourselves, we have already developed habitual ways of looking at life. The foundation of our personality structure has already been laid for us by others in our childhood.

Obviously we do not bring ourselves up, and, by the time we come of age, many of these early influences become fairly fixed within us. It may even be said that to some degree we are living a life which has been selected for us. However, we do have the ability to alter our course. All of us have far greater versatility than we generally recognize. There are always alternatives which beckon us to redirect at least portions of our life.

THE TRICK, of course, is to know what is best for us on the one hand and, on the other, to overcome the chronic inertia of fixed habits. If we could learn how to judge the healthiness or unhealthiness of our own emotional reactions, both these tasks would be much easier for us. Judgment, however, requires a norm or standard. Taking our temperature, for example, would be meaningless if we did not know which figures on the thermometer indicated good or bad health.

Similarly, in order to take our emotional temperature, we must first of all know what the signs of health and illness are. Although we cannot expect this to be as simple as reading a thermometer, it is by no means difficult to learn what the major signs of good emotional adjustment are. These signs manifest themselves in the three general areas of expression available to us: thinking, feeling and acting – which rarely have a completely independent existence.

A WELL ADJUSTED PERSON does not allow his thinking to be emotionally distorted. The thinking of a well adjusted person is generally realistic in nature. This means that he makes an effort to know the facts of a situation and that he will even more strenuously adapt and limit his thinking to these facts. All of us have impelling wishes and desires which are capable of whisking us away from the frequently less pleasant facts of reality. Everyone certainly has tasted the luxury of hypothetically supposing the fulfillment of his wishes. Although occasional self-indulgence along these lines is not harmful, such thinking rarely, if ever, provides us with a substantial basis for efficient action.

The way many people approach marriage is a case in point. Despite all of the prosaic obligations, even the difficulties, they may have witnessed and experienced in the domestic life of their childhood, they contemplate their marriage almost purely in terms of the emotional ambitions they have for it. For example, the young woman who is about to marry frequently forgets her own mother's struggles with the children, the dishes, the laundry, her budget, even her husband; thoughts of love, devotion, a cute little apartment and babies who never cry easily monopolize her mind. This amounts to daydreaming her way into marriage.

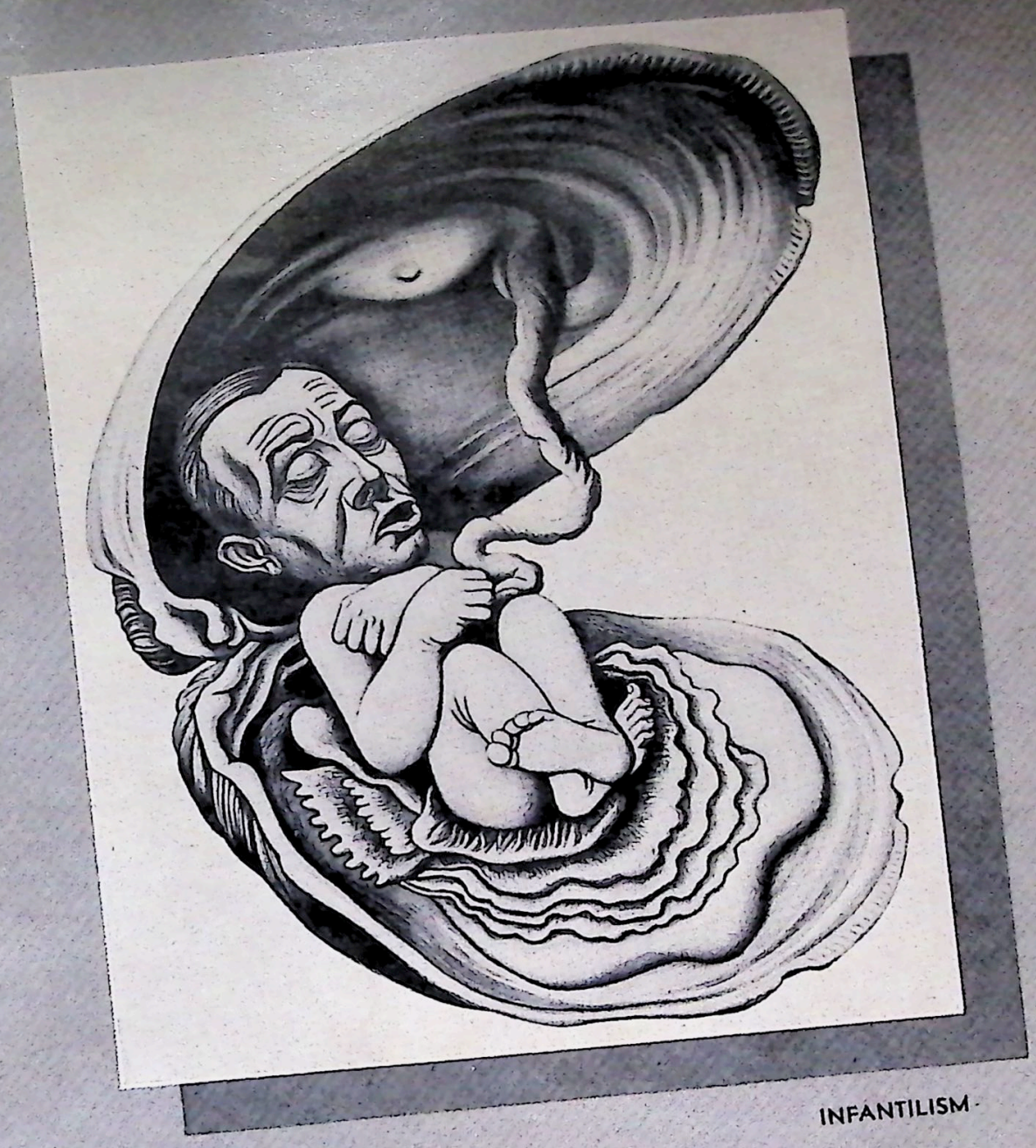
Instead of recognizing our ambitions for what they are, our enthusiasms and good intentions easily get out of hand and weaken our thinking to the point where we proverbially count our chickens before they are hatched. The danger involved is that the more enthusiastically we count, the more completely do we forget about the process of hatching.

Realistic thinking is concerned with the means of obtaining something, rather than with thoughts of how nice possession would be. Achievement, in turn, demands our acceptance of the world around us. We cannot create merely out of our wishes; they may give us direction, but by themselves they cannot rearrange the facts of our lives for us.

WISHFUL THINKING decreases our ability to enjoy life. By allowing our wishes to dominate our thinking, we make ourselves more prone than ever to disillusionment and disappointment. Instead of reconciling ourselves to the whole host of small unpleasant occurrences which unavoidably appear from time to time, we react to them each time as though they were unusual and the result only of our own bad luck. The outcome is that we are just as upset by the 10th occurrence of something unpleasant as we were by our first experience with it.

This shows a remarkable inability to benefit from our experience. Rationally, we cannot expect everything in our life to conform to the desires we have for it, and the resistance we develop only serves to increase the emotional cost of living. There are many times that we simply have to temper our wishes and accept the admittedly second-rate satisfaction of knowing that we can "take it." This does not imply that disappointment will lose its unpleasant quality, but rather that it will not have an unnecessarily crippling effect on our emotional life. Besides, it is very much easier to come to terms with the world than to get the world to come to terms with us.

Although this may entail the abandonment of some of our desires, it leaves us, at any rate, in a far better position to enjoy the fulfillment of others. Turning away from the facts in the hope that everything will work out is essentially no different from drug addiction. We cannot expect to guarantee our happiness by trying to blind ourselves to recurrent facts which influence us anyway. ◆



INFANTILISM

FRUSTRATION

SUPERIORITY

PIONEER THINKERS IN PSYCHOLOGY

SIGMUND FREUD

Founder of Psychoanalysis

by Calvin S. Hall

ALTHOUGH SIGMUND FREUD was born in Freiberg, Moravia, and died in London, he belongs to Vienna, where he lived for nearly 80 years. Had the Nazis not taken over Austria in 1937, forcing Freud to seek haven in England, his whole life, except the first three years of it, would have been spent in the Austrian capital.

Freud's long life, from 1856 to 1939, spans one of the most creative periods in the history of science. The same year that the 3-year-old Freud was taken by his family to Vienna saw the publication of Charles Darwin's *Origin of Species*. Man became an object of scientific study, no different, save in complexity, from other forms of life. The year following this, when Freud was 4, Gustav Fechner founded the science of psychology. This great German scientist and philosopher demonstrated in 1860 that mind could be studied scientifically and measured quantitatively. Psychology took its place among the other natural sciences.

These two men, Darwin and Fechner, had a tremendous impact upon the intellectual development of Freud, as they did upon so many other young men of that period. Interest in the biological sciences and psychology flourished during the second half of the century. Louis Pasteur and Robert Koch, by their fundamental work on the germ theory of disease, established the science of bacteriology; Gregor Mendel, by his investigations of the garden pea, founded the modern science of genetics. Life sciences were on a creative rampage.

There were other influences that affected Freud even more profoundly. These came from physics. In the middle of the century, the great German physicist, Hermann von Helmholtz, formulated the principle of the conservation of energy, which led to one discovery after another in the field of dynamics.

But the age of energy and dynamics did more than provide man with electrical appliances, television, automobiles, airplanes and atomic and hydrogen bombs. It furnished him with a new conception of man. Darwin conceived of man as an animal. Fechner proved that the mind of man does not stand outside of science but that it can be brought into the laboratory and accurately measured. The new physics made possible an even more radical view of man: that man is an energy system and that he obeys the same physical laws which regulate the soap bubble and the movement of the planets.

As a young scientist engaged in biological research during the last quarter of the 19th century, Freud could hardly avoid being influenced by the new physics. Energy and dynamics were seeping into every laboratory and permeating the minds of scientists. It was Freud's good fortune, as a medical student, to come under the influence of Ernst von Brücke, director of the Physiology Laboratory at the University of Vienna and one of the greatest physiologists of the century. His book, *Lectures on Physiology*, published in 1874, the year after Freud entered medical school, set forth the radical view that the living organism is a dynamic system to which the laws of chemistry and physics apply. Freud greatly admired Von Brücke and quickly became indoctrinated by this new dynamic physiology.

Thanks to Freud's singular genius, he was to discover some 20 years later that the laws of dynamics could be applied to man's personality as well as to his body. When he made his discovery, Freud proceeded to create a dynamic psychology: one that studies the transformations and exchanges of energy within the personality. This was Freud's greatest achievement and one of the greatest achievements in modern science. It is certainly the crucial event in the history of psychology.

Although Freud was trained in medicine, and received his medical degree from the University of Vienna in 1881, he never intended to practice medicine. He wanted to be a scientist.

IN PURSUIT OF this goal, he entered the Medical School of the University of Vienna in 1873, when he was 17, and undertook his first original piece of research in 1876. In this initial investigation he was looking for the recondite testes of the eel! He found them. For about 15 years thereafter Freud devoted himself to investigations of the nervous system – not exclusively, however, because he found that the financial rewards of scientific research would not support a wife, six children and sundry relatives. Moreover, the anti-Semitism that prevailed in Vienna during this period prevented Freud from receiving university advancement. Consequently, much against his wishes and upon the advice of Von Brücke, he was forced to take up the practice of medicine. In spite of his practice, he found time for neurological research and eventually earned a reputation as a promising young scientist.

In a way it was fortunate that Freud was forced to practice medicine. Had he remained a medical scientist he might never have created a dynamic psychology. Contact with patients stimulated him to think in psychological terms.

WHEN FREUD began the practice of medicine, it was natural, in view of his scientific background, that he should specialize in the treatment of nervous disorders. This branch of medicine was in a backward state. There was not a great deal that could be done for people suffering from aberrations of the mind. Jean Charcot, in France, was having some success with hypnosis, particularly in the treatment of hysteria. Freud spent a year in Paris (1885-6) learning Charcot's method of treatment. However, Freud was not satisfied with hypnosis, because he felt that its effects were only temporary and did

not get at the seat of the trouble. From another Viennese physician, Josef Breuer, he learned of the benefits of the cathartic, or "talking-out-your-problems," form of therapy. The patient talked while the physician listened.

Although Freud was later to develop new and improved therapeutic techniques, the "talking-out," or free-association, method provided him with a great deal of knowledge about the underlying causes of abnormal behavior. With true scientific curiosity and zeal, he began to probe deeper and deeper into the minds of his patients. His probing revealed dynamic forces at work which were responsible for creating the abnormal symptoms that he was called upon to treat. Gradually there began to take shape in Freud's mind the idea that most of these forces were unconscious.

This was the turning point in Freud's scientific life. Putting physiology and neurology aside, he became a psychological investigator. The room in which he treated his patients became his laboratory, the couch, his only piece of equipment and the ramblings of his patients, his scientific data. Add to these the restless, penetrating mind of Freud, and one has named all the ingredients that went into the creation of a dynamic psychology.

In the 1890s, with characteristic thoroughness, Freud began an intensive self-analysis of his own unconscious forces in order to check on the material supplied by his patients. By analyzing his dreams and saying to himself whatever came into his mind, he was able to see the workings of his own inner dynamics. On the basis of the knowledge gained from his patients and from himself, he began to lay the foundation for a theory of personality. The development of this theory engaged his most creative efforts for the rest of his life. Later, he was to write, "My life has been aimed at one goal only: to infer or to guess how the mental apparatus is constructed and what forces interplay and counteract in it."

IT WAS during the '90s that *The Interpretation of Dreams* was written, although it was not published until the last days of the century and was given the publication date 1900. It was an auspicious beginning for the new century. This book, which is now considered to be one of the great works of modern times, is more than a book about dreams. It is a book about the dynamics of the human mind. The last chapter, in particular, contains Freud's theory of the mind.

Few laymen read the book when it first appeared, and it was ignored in medical and scientific circles. It took eight years to sell the first printing of 600 copies. But the initial failure of *The Interpretation of Dreams* did not faze Freud. With the confidence of a man who knows that he is on the right track, Freud continued to explore man's mind by the method of psychoanalysis. At the same time that he was helping his patients to overcome their troubles, they were helping him to extend his knowledge of unconscious forces.

In spite of the poor reception accorded *The Interpretation of Dreams*, a succession of brilliant books and articles flowed from Freud's pen during the next 10 years. In 1904, he published *The Psychopathology of Everyday Life*, which presented the novel thesis that slips of the tongue, errors, accidents and faulty memory are all due to unconscious motives. The following year three more significant works appeared; one of these gave a detailed account of Freud's method of tracking down the psychological causes of mental disorders. *Three Essays on Sexuality* set forth Freud's views on the development of the sex instinct. By many authorities this is considered to be Freud's most important work aside from *The Interpretation of Dreams*. Whether one agrees with this evaluation or not — and the present writer does not — the *Three Essays* earned for Freud the unwarranted reputation of being a pansexualist. The third volume, *Wit and Its Relation to the Unconscious*, showed how the jokes that people tell are the product of unconscious mechanisms.

Although for a number of years Freud worked pretty much in isolation from the rest of the scientific and medical world, his writings and the success of the psychoanalytic method in treating neurotic patients brought his name to the attention of a small group of people. Among these were Carl Jung and Alfred Adler, both of whom were later to withdraw their support of psychoanalysis and develop rival schools. But they were important followers of Freud in the years before World War I and helped to establish psychoanalysis as an international movement.

IN 1909, Freud received his first academic recognition when he was invited to speak at the 20th anniversary celebration of the founding of Clark University in Worcester, Mass. Stanley Hall, president of Clark University and himself a distinguished psychologist, recognized the importance of Freud's contribution to psychology and helped to promote his views in the United States.

More and more recognition came to Freud, and following World War I his name became known to millions of people throughout the world. Psychoanalysis was the rage, and its influence was felt in every theater of life. Literature, art, religion, social customs, morals, ethics, education, the social sciences — all felt the impact of Freudian psychology. It was considered fashionable to be psychoanalyzed and to use such words as "subconscious," "repressed urges," "inhibitions," "complexes" and "fixations" in one's conversation. Much of the popular interest in psychoanalysis was due to its associations with sex.

THROUGHOUT HIS LIFE Freud continued to write. Hardly a year passed without his publishing at least one important book or article. His collected works, which are now appearing in a standard English edition, comprise 24 volumes. Freud is said to have been a master of prose writing. He had a felicity of expression that is unequaled among scientific writers. Without talking down to his readers, he nevertheless managed to convey his ideas in a lively, interesting and lucid form.

Freud never felt that his work was finished. As new evidence came to him from his patients and his colleagues, he expanded and revised his basic theories. In the 1920s, for example, when Freud was 70, he completely altered a number of his fundamental views. He revamped his theory of motivation, completely reversed his theory of anxiety and instituted a new model of personality based upon the id, the ego and the superego. One does not expect to find such flexibility in a man of 70. But Freud cannot be judged by ordinary standards.

He learned the lesson early in life that scientific conformity means intellectual stultification.

What was Freud? By profession he was a physician. He treated sick people by methods that he himself had devised. Today he would be called a psychiatrist. Psychiatry is a branch of medicine that treats mental diseases and abnormalities. Freud was one of the founders of modern psychiatry.

Although he had to earn his living by practicing medicine, Freud was not by choice a medical doctor. In 1927 he said, "After forty-one years of medical activity, my self-knowledge tells me that I have never really been a doctor in the proper sense. I became a doctor through being compelled to deviate from my original purpose." What was this original purpose? It was to understand some of the riddles of nature and to contribute something to their solution.

By preference Freud was a scientist. As a young medical student and later in his connections with various hospitals, he made studies of physiological phenomena. He learned how to collect data by careful observation, to correlate his findings and draw conclusions and to check his inferences by further observation. Although Freud did not make any outstanding discovery as a physiologist, this early experience in the laboratory provided him with excellent discipline in scientific method. It taught him how to be a scientist.

In the 1890s, Freud discovered what kind of scientist he wanted to be. In a letter to a friend he wrote, "It is psychology which has been the goal beckoning me from afar." For the rest of his life, some 40 years, Freud was a psychologist.

What is the relation of psychology to psychoanalysis? Freud himself answered this question in 1927: "Psychoanalysis falls under the head of psychology – not of medical psychology in the old sense or the psychology of morbid processes but simply of psychology. It is certainly not the whole of psychology but its substructure and perhaps even its entire foundation." Freud is here speaking of psychoanalysis as a theory of personality. But there is another side of psychoanalysis. It is also a method of psychotherapy. It consists of techniques for treating emotionally disturbed people. For Freud, the therapeutic aspects of psychoanalysis were secondary to the scientific and theoretical aspects. He did not want to see the therapy swallow up the science. It might be wise, therefore, to distinguish between Freudian psychology as a theoretical system of psychology and psychoanalysis as a method of psychotherapy.

PHYSICIAN, psychiatrist, scientist, psychologist – Freud was all of these things. But he was also something more. He was a philosopher. We get a hint of this in a letter he wrote to a friend in 1896: "As a young man I longed for nothing else than philosophical knowledge, and I am now on the way to satisfy that longing by passing over from medicine to psychology."

It was not at all unusual for the scientists of the 19th century to be attracted to philosophy. In fact, for many of them, science was philosophy. Does not philosophy mean "love of knowledge"? And what better way is there to show one's love of knowledge than by being a scientist? This was the substance of what Goethe was saying to every German intellectual. Goethe was the most influential voice in 19th century thought and the idol of Germany. Freud was not immune to Goethe's influence. In fact, he decided upon a career in science after hearing Goethe's inspirational essay on nature read aloud at a popular lecture.

Freud's philosophical interests were not those of the professional or academic philosopher. His philosophy was social and humanitarian. It took the form of building a philosophy of life. The Germans have a special word for it. They call it a *Weltanschauung*, which means "world-view." Freud stood for a philosophy of life that is based on science rather than on metaphysics or religion. He felt that a philosophy of life worth having is one based upon a true knowledge of man's nature, knowledge that could be gained only by scientific inquiry and research.

Freud did not feel that psychoanalysis was called upon to develop a new *Weltanschauung*. It was necessary only to extend the scientific world-view to the study of man. Freud's own philosophy of life can be summed up in a phrase: "knowledge through science."

Freud's intimate knowledge of human nature made him both pessimistic and critical. He did not have a very high opinion of the bulk of mankind. He felt that the irrational forces in man's nature are so strong that the rational forces have little chance of success against them. A small minority might be able to live a life of reason, but most men are more comfortable living with their delusions and superstitions than with the truth. Freud had seen too many patients fighting vigorously to preserve their delusions to place much faith in the drawing power of logic and reason. Men resist knowing the truth about themselves. This pessimistic viewpoint is developed most fully in his book *The Future of an Illusion*, and provides the underlying mood for many of his writings.

FREUD WAS also a social critic. He believed that society, which has been fashioned by man, reflects to a great extent man's irrationality. As a consequence, each new generation is corrupted by being born into an irrational society. The influence of man on society and of society on man is a vicious circle from which only a few hardy souls can free themselves.

Freud felt that the situation might be ameliorated by the application of psychological principles in rearing and educating children. This would mean, of course, that parents and teachers would have to undergo a psychological re-education before they could be effective agents of reason and truth. Freud did not minimize the immensity of this task, but he did not know any other way by which to create a better society and better people. Freud's social criticism is presented in his book *Civilization and Its Discontents*.

What then was Freud? Physician, psychiatrist, psychoanalyst, psychologist, philosopher and critic – these were his several vocations. Yet, taken separately or together, they do not really convey Freud's importance to the world. Although the word "genius" is used indiscriminately to describe a number of people, there is no other single word that fits Freud as well as this word does. He *was* a genius. One may prefer to think of him, as I do, as one of the few men in history who possessed a universal mind. Like Shakespeare and Goethe and Leonardo da Vinci, whatever Freud touched he illuminated. He was a very wise man. ◆

FREUD'S Approach to Personality

by Gardner Murphy and Friedrich Jensen

FREUD STARTED with orthodox medicine and left it as a result of association with Breuer, Charcot and others. His study of hypnosis led him to the idea of the purely psychogenic origin of nervous symptoms. He soon abandoned hypnosis and developed the cathartic, i.e., the cleansing, method for the solution of mental conflicts. Then he built up definite viewpoints on the division of mental life into the conscious and the unconscious.

He tried to find a way to reach the unconscious as the real spot where psychic disturbances began. With the help of (1) free association, (2) mistakes as an involuntary betrayal of what was going on in the unconscious and, above all, (3) the interpretation of dreams, he was able, without the aid of hypnosis, to obtain a picture of the state of the carefully hidden unconscious of his patients. He found that its main content in nervous patients was composed of repressed fragments from the conscious, concentrated into complexes – comparable to undigested parts of events or experiences disturbing the smooth functioning of the organism as a whole. He then succeeded in dissolving and making such complexes conscious. The nervous symptoms thereupon disappeared and the patient seemed cured.

The discovery of an apparent direct causal relation between the existence of complexes and the presence of neurotic symptoms – as shown by the fact that dissolution of the symptoms occurred when previously unrecognized systems of ideas were brought to light through analysis and admitted into consciousness – strengthened Freud's already firm belief in a complete determinism of all psychological phenomena.

All ideas, wishes, desires, activities of every sort, anxieties, compulsions, neurotic symptoms – in fact, all events within any individual's experience and behavior, "normal" or "abnormal," "voluntary" or "involuntary" – are determined by the organization of innate urges and drives reacting within the limitations of a physical and social environment. The tasks of psychoanalysis, according to Freud, were those of discovering the basic urges or instincts, describing the ways in which these were expressed in the form of thoughts and acts, analyzing the structure of the personality as formed on this basis, explaining the mechanisms involved in normal and abnormal behavior and determining adequate therapeutic techniques for the reorganization of those personalities in which faulty developmental processes precluded the possibility of satisfactory social adjustments.

IN ATTEMPTING TO SOLVE these problems, one of the first things to attract Freud's attention was the very evident importance of the early sexual life of the child. In the analysis of complexes, it appeared that the simple content of the unconscious and the components of the complexes always had sexual roots. Instinctive drives were the source of the urgent, impelling forces activating the complexes. These discoveries led Freud to the establishment of his theory of infantile sexuality on which he then built his doctrine of the libido.

The importance of childhood sexuality in the development of psychoanalytic theory can hardly be overemphasized. Freud brought out the fact that every individual has sexual drives much earlier than was formerly assumed. By interpreting sexuality broadly, many of the acts and gestures of the child could be brought under his classification. Infantile wishes are present, many of which cannot be gratified and must be repressed into the unconscious, where they persist in the form of complexes and eventually find expression in the form of dreams, neurotic symptoms and nervous disorders. The libido, or sexual drive, is the primary moving force in mental life.

Freud's concept of the libido has often been misinterpreted and greatly misunderstood. "Libido," in the broad, inclusive sense in which Freud uses it, is a term designating the energy, force or drive involved in all those activities which can be included in the various meanings of the word "love." This inevitably centers about the concept of sexual love of the normal adult, but it also includes such varied forms of affection as filial devotion, the puppy-love affairs of adolescence, parental love, philanthropic love of mankind and even self-love.

The libido is, then, a native drive or urge, present in every human being even before birth, entering into every human activity, subject to modification and control as the individual himself grows and develops. Several distinct stages may be observed in the manifestations of the libido. The first is designated by Freud as the "infancy period" – from birth to about 5 years of age. This is the stage which has been named "polymorphous-perverse," because of the fact that the activities of the child in seeking gratification of his libidinal desires resemble those which in adults are considered perversions. The satisfaction of the libido, at this level, is gained through the excitation of "erogenous zones" – those parts of the body which are especially sensitive to stimulation through slight pressure. Among the most important erogenous zones may be mentioned the sexual organs themselves and the mucous surfaces at both ends of the digestive tract, but any part of the body may at times be erogenous.

The second stage in the child's development, from 5 to about 12, is called the "latency period." Here may be noticed an almost complete disappearance of the undisguised sexual interests and activities of the earlier infantile period. The

libido is directed outward, toward the persons and objects in the immediate environment.

In the third stage, the adolescent or pubertal period, the manifestations of the libido are again primarily sexual. The child again shows an impelling curiosity about sexual matters, a revival of autoerotic activities. The development of primary and secondary sexual characteristics forces upon him the realization of his increasing maturity. The increasing force of the sexual drive shows itself in a rapid growth of interest in members of the opposite sex. From the later developments of the adolescent period, the normal individual passes over into the overt heterosexual interests and activities of the adult.

Early in the child's development, during the infancy period, the unconscious desire for sexual satisfaction becomes directed toward the parent of the opposite sex, resulting in the formation of the group of desires called the "Oedipus complex." Conscious expression of them may take the form of seeking caresses, bodily contact or demonstrations of affection from the parent. Unconsciously, the child wants direct (organ) satisfaction. The normal process of outgrowing the Oedipus complex consists partly in repressing some of the desires, partly in finding direct sexual satisfactions through autoerotic activities, partly in finding substitute satisfactions for others. Largely because of the presence of the autoerotic actions, the "castration complex" also arises late in the infancy period, through threats of punishment on the part of the parents. The part of the Oedipus complex which is not sublimated persists as castration complex.

WHEN IT WAS FOUND that the expression of the libido in the form of wishes and desires met with resistance because of the incompatibility of the latter with the already existing tendencies in consciousness, it became necessary to make a further analysis of the mechanisms involved in this resistance. For it, Freud chose the word "repression." Those ideas which do not fit in with the existing pattern of consciousness *fail to be recognized*, are not admitted to consciousness and are apparently banished to some other region of mental life. In order to account fully for these phenomena, the psychoanalytic hierarchy of divisions of mental life was developed as follows.

Mental life, according to psychoanalysis, is divided "topically" into the conscious, the preconscious and the unconscious. Of these, the unconscious constitutes by far the greater part. It is made up of those elements of mental life which have never been in consciousness or, having once been conscious, have been repressed. It is prior to both the conscious and the preconscious, in the sense of appearing earlier in both race and individual. It consists of unverbalized ideas, together with their related effects, and of various instinctive strivings or impulses. Knowledge of the unconscious can come about only through the translation or transformation of its contents into conscious form. This may occur spontaneously or be effected through using the psychoanalytic technique.

The conscious consists only of that part of mental life of which one is aware at any given instant. Consciousness appears early in the development of the individual, probably in the first year of life, through the action of instinctive strivings coming into contact with the restrictions of the external world. The content of consciousness varies with the activities of the individual, always shifting, always changing, never at any given time very large in comparison with the vastness of the unconscious.

Between these two fields of mental activity there lies a third, the preconscious, which has some of the characteristics of each of the others and yet may be differentiated from both of them. The preconscious consists of that part of mental life which has not been definitely repressed and which can therefore be brought into the field of consciousness more or less easily by associative processes. For this reason the preconscious is considered to be related more closely to the conscious than to the unconscious.

The libido normally dominates the activity in all mental life. But although the libido has long been recognized as the primary driving force, Freud soon found that other tendencies opposed it. These he grouped together and called the self-preservative instinct. Further observation in the analysis of cases brought out the fact that the self-preservative tendencies were, after all, expressions of the libido in the form of self-love or narcissism. Even this conception proved to be inadequate and so Freud finally came to the conclusion that there must be a group of destructive drives or urges, entirely separate from and opposed to the libido.

This he called the "death instinct." Both the expression of the libido in the form of the "life instinct" (also called "Eros") and the destructive tendencies which make up the "death instinct" may be given any one of three directions in being converted into overt activity. The life instinct may be (1) directed outward toward the objects or persons of the external world and thus be given immediate satisfaction, (2) inhibited or repressed and then be given indirect satisfaction (sublimation); and (3) directed inward, resulting in narcissism and its modifications as self-preservative tendencies.

The death instinct, likewise, may be (1) directed outward in the form of aggressive activities toward other persons or objects; (2) inhibited (through conflict with reality), resulting in the regression to a previous level of development; and (3) directed inward, taking the form of self-destructive, self-injuring behavior. Combinations of these two instincts in different ways may give rise to sadism, masochism etc.

In the very early life of the child, the expression of these instincts in actual behavior is controlled, inhibited and directed by the parents. Somewhat later, other persons outside the immediate family – those constituting the various social groups in which the child finds himself – through their expressions of approval and disapproval, add to the burden of authority to which the child is subjected. As the child's personality develops – as he becomes more socialized, we say – the responsibility for the proper direction and control of these impulses shifts from the parents and society in general to the child himself.

The basic part of the personality, as we have already indicated, is made up of unconscious strivings and urges or tendencies of the libido to find expression. This Freud named the "id," a term used by Nietzsche. It directly or indirectly produces the driving power for all activity. It seeks immediate satisfaction of the instincts and urges which compose it. It is in itself, tumultuous, chaotic, uncontrolled. It is entirely unconscious, though it is not identical with *all* that part of mental life previously designated as "the unconscious."

Arising from the id, but never entirely differentiated from it, Freud found another pattern of activities and experiences, a second part of personality – the ego. The ego is partly conscious, partly unconscious and partly preconscious. Just as the id is made up largely of instincts, urges and habit tendencies, so the ego is made up largely of ideational elements. The id is in itself unregulated, while the ego possesses a regulatory power which it extends not only over its own activities but those of the id as well. The ego is molded from the contacts of the strivings and urges of the id with the external world. (In non-Freudian language, the activities of the infant in finding satisfactions for his organic needs give rise to conscious experiences, ideas, precepts and concepts.)

THERE REMAINS yet a third part of the mental apparatus. This has been termed the "ego-ideal," or the "superego." Like the ego, the superego is partly conscious, partly unconscious and partly preconscious. The best term for it in ordinary terminology is "conscience." It is partly the result of identification of the child with one or both of his parents, partly the result of the accumulation of prohibitions and moral concepts from extrafamilial sources. The superego is more intimately related and more closely connected with the id than with the ego, but its tendencies are for the most part in opposition to those of the id, and consequently we find a continual struggle between the superego and the id on the battleground of the ego. From the superego additional power is derived which is used in repressing the tendencies of the id; the ego thus guides the libido to socialized activities.

From this we see that the all-important process of repression is a function of the ego, to a large extent motivated and directed by the superego, holding in check the forces and impulses of the id as these attempt to find expression in overt, objective, real form. Neurotic symptoms are the indirect expressions of unsuccessfully repressed ideas, wishes, impulses and desires. In many persons, it is true, successful repression may take place: Ideas, in being relegated to the limbo of the unconscious, are divested of their emotional force and consequently have no tendency to seek expression in the disguise of symptoms, while unacceptable impulses are temporarily repressed but are later given satisfactory and adequate expression in some modified and thoroughly desirable form. It is through the study of the *unsuccessful* cases of repression (the neurotic cases who come to the analyst for treatment), however, that the process of repression and the consequent formation of symptoms may best be understood.

We now have the structure of the human character, as psychoanalysis has described it. The framework, which gives form to the character, is the organization of id, ego and superego; the content is the libido, the drives (at a more complicated stage) and their constellations, the complexes. Form and content are bound together and complement each other, since the construction of the character comes from the libido and is directed by it. Psychoanalysis, however, has *not* taken the next step: to regard character as a totality.

Psychoanalysis has tried to show that the law of the "bipolarity" of natural events holds good for mental life as well. Bipolarity (Stekel) is the concurrent presence of two opposing tensions in one and the same object, as, for example, the positive and negative poles of a magnet. Everything that takes place in the mind is governed by two poles, and where we can discover only one pole, we may be sure that there is a second opposing pole present.

Psychoanalysis did not like the word "bipolar," and borrowed a word from chemistry to describe this state: "ambivalence" (Bleuler). There are chemical elements that can exhibit more than one valence; they are ambivalent. Mental elements are also capable of combining with others in various ways. We love and hate a person at the same time; we want something, and we don't want it; we are attracted and yet struggle against the attraction. Every conflict shows a self torn in two directions – the fight of the unconscious against the conscious.

Without having made use of this term, Freud's observations were directed toward the polar opposition in the mind. We recall his conception of the neurosis as a compromise between the sexual drive in the unconscious and the ego drive in the conscious. In his attempt to give this bipolarity a historical basis, he came upon two guiding factors which govern the mental life, the pleasure principle and the reality principle.

THE PLEASURE PRINCIPLE is the older of the two. In humanity's early days, in the time of luxuriant vegetation, there was no lack. All the drives were simply unlimited pleasure drives and easily satisfied. Cold reality drove them from their paradise, and alongside the pleasure principle appeared the reality principle. A number of the drives bowed to the inevitable. To save man from destruction, the drives had to be sublimated into speaking, thinking, reason, work, communal government, culture and civilization. The chief manifestation of the reality principle was the struggle for self-preservation.

Other drives, however, did not subject themselves to the necessity of civilization and remained wild and untamed, far from reality, desiring only boundless gratification. These are the sexual drives, governed to this very day by the pleasure principle. A fight between these two groups was unavoidable. In our hard and restricted life, pleasure and necessity cannot be satisfied equally. The stronger wins. The reality principle appears as the maintainer of life, the father of the ego-drive, fighting constantly to safeguard life, uninfluenced by pleasure or pain, governing, managing and suppressing.

Just as the bodily development of each individual is in some ways a brief repetition of the development of the whole race, so does the developmental process from pleasure principle to reality principle likewise repeat itself within a few years in each growing child. All education and adjustment mean a gradual subduing of the pleasure principle. The reality motive, the compulsion "You must," interferes, limits, curtails pleasure. The id resists. The result is constant conflict, fluctuation of the pleasure-pain curve, the restless dissatisfaction of life.

Freud applied the law of bipolarity in later years to an increasing extent. The pleasure and reality principles are both supporters of life; both are based upon the life drive. The opposite pole of the life drive is the death drive. In his book *Beyond the Pleasure Principle* he comes to the question whether the pleasure principle is really the only governing force in the unconscious or whether it is not to be supplemented by a deeper, further-reaching energy. ♦

The Meaning of Dreams

by Sigmund Freud

ONE TYPE OF DREAM which may be described as typical is that containing the death of some loved relative – for instance, parent, brother, sister or child. Two classes of such dreams must at once be distinguished: those in which the dreamer is unaffected by grief, so that on awakening he is astonished at his lack of feeling, and those in which the dreamer feels deeply pained by the death and may even weep bitterly in his sleep.

We need not consider the dreams of the first of these classes, for they have no claim to be regarded as typical. If we analyze them, we find that they have some meaning other than their apparent one and that they are intended to conceal some other wish. Such was the dream of the aunt who saw her sister's only son lying in his coffin. It did not mean that she wished her little nephew dead; it merely concealed a wish to see a particular person of whom she was fond and whom she had not seen for a long time – a person whom she had once before met, after a similarly long interval, beside the coffin of another nephew. This wish, which was the true content of the dream, gave no occasion for grief, and no grief, therefore, was felt in the dream. It will be noticed that the affect felt in the dream belongs to its latent, and not to its manifest, content and that the dream's *affective* content has remained untouched by the distortion which has overtaken its *ideational* content.

Very different are the dreams of the other class – those in which the dreamer imagines the death of a loved relative and is at the same time painfully affected. The meaning of such dreams, as their content indicates, is a wish that the person in question may die. And since I must expect that the feelings of all of my readers and any others who have experienced similar dreams will rebel against my assertion, I must try to base my evidence for it on the broadest possible foundation...

If anyone dreams, with every sign of pain, that his father or mother or brother or sister has died, I should never use the dream as evidence that he wishes for that person's death *at the present time*. The theory of dreams does not require as much as that; it is satisfied with the inference that this death has been wished for at some time or other during the dreamer's childhood. I fear, however, that this reservation will not appease the objectors; they will deny the possibility of their *ever* having had such a thought with just as much energy as they insist that they harbor no such wishes now. I must therefore reconstruct a portion of the vanished mental life of children on the basis of the evidence of the present.

LET US first consider the relation of children to their brothers and sisters. I do not know why we presuppose that that relation must be a loving one, for instances of hostility between adult brothers and sisters force themselves upon everyone's experience, and we can often establish the fact that the disunity originated in childhood or has always existed. But it is further true that a great many adults who are on affectionate terms with their brothers and sisters and are ready to stand by them today passed their childhood on almost unbroken terms of enmity with them . . .

It is easy to see that the character of even a good child is not what we should wish to find in an adult. Children are completely egoistic; they feel their needs intensely and strive ruthlessly to satisfy them – especially as against the rivals, other children and, first and foremost, their brothers and sisters. But we do not on that account call a child "bad"; we call him "naughty"; he is no more answerable for his evil deeds in our judgment than in the eyes of the law . . .

IT IS TRUE, no doubt, that morality does not set in simultaneously all along the line and that the length of nonmoral childhood varies in different individuals. If this morality fails to develop, we like to talk of "degeneracy," though what in fact faces us is an inhibition in development. After the primary character has already been overlaid by later development, it can still be laid bare again, at all events in part, in cases of hysterical illness. There is a really striking resemblance between what is known as the hysterical character and that of a naughty child. Obsessional neurosis, on the contrary, corresponds to a supermorality imposed as a reinforcing weight upon fresh stirrings of the primary character.

Many people, therefore, who love their brothers and sisters and would feel bereaved if they were to die, harbor evil wishes against them in their unconscious, dating from earlier times, and these are capable of being realized in dreams.

It is of quite particular interest to observe the behavior of small children up to the age of 2 or 3, or a little older, toward their younger brothers and sisters. Here, for instance, was a child who had so far been the only one; and now he was told that the stork had brought a new baby. He looked the new arrival up and down and then declared decisively: "The stork can take him away again!" I am quite seriously of the opinion that a child can form a just estimate of the setback he has to expect at the hands of the little stranger.

Even if a child only comes to realize the situation later on, his hostility will date from that moment. I know of a case in which a little girl of less than 3 tried to strangle an infant in its cradle because she felt that its continued presence boded her no good. Children at that time of life are capable of jealousy of any degree of intensity and obviousness . . . Hostile feelings toward brothers and sisters must be far more frequent in childhood than the unseeing eye of the adult observer can perceive.

At this point someone will perhaps interrupt: "Granted that children have hostile impulses toward their brothers and sisters, how can a child's mind reach such a pitch of

depravity as to wish for the *death* of his rivals or of playmates stronger than himself, as though the death penalty were the only punishment for every crime?" Anyone who talks like this has failed to bear in mind that a child's idea of being dead has nothing much in common with ours apart from the word. Children know nothing of the horrors of corruption, of freezing in the ice-cold grave, of the terrors of eternal nothingness – ideas which grown-up people find it so hard to tolerate, as is proved by all the myths of a future life . . .

To children, who, moreover, are spared the sight of the scenes of suffering which precede death, being dead means approximately the same as being gone – not troubling the survivors any longer. A child makes no distinction as to how this absence is brought about: whether it is due to a journey, to a dismissal, to an estrangement or to death. If, during a child's prehistoric epoch, his nurse has been dismissed and if soon afterward his mother has died, the two events are superimposed on each other in a single series in his memory as revealed in analysis.

When people are absent, children do not miss them with any great intensity; many mothers have learned this to their sorrow when, after being away from home for some weeks on a summer holiday, they are met on their return by the news that the children have not once asked after their mother. If their mother does actually make the journey to that "undiscovered country, from whose bourn no traveler returns," children seem at first to have forgotten her, and it is only later on that they begin to call their dead mother to mind.

Thus, if a child has reasons for wishing the absence of another, there is nothing to restrain him from giving this wish the form of the other child's being dead. And the psychical reaction to dreams containing death-wishes proves that, in spite of the different content of these wishes in the cases of children, they are nevertheless in some way or other the same as wishes expressed in the same terms of adults.

If, then, a child's death-wishes against his brothers and sisters are explained by the childish egoism which makes him regard them as his rivals, how are we to explain his death-wishes against his parents, who surround him with love and fulfill his needs and whose preservation that same egoism should lead him to desire?

A solution of this difficulty is afforded by the observation that dreams of the death of parents apply with preponderant frequency to the parent who is of the same sex as the dreamer. I cannot pretend that this is universally so, but the prevalence in the direction I have indicated is so evident that it requires to be explained by a factor of general importance. It is as though – to put it bluntly –·a sexual preference were making itself felt at an early age, as though boys regarded their fathers (and girls their mothers) as their rivals in love – whose elimination could not fail to be to their advantage.

Before this idea is rejected as a monstrous one, it is as well in this case, too, to consider the real relations obtaining – this time between parents and children. We must distinguish between what the cultural standards of filial piety demand of this relation and what everyday observation shows it in fact to be. More than one occasion for hostility lies concealed in the relation between parents and children – a relation which affords the most ample opportunities for wishes to arise which cannot pass the censorship . . .

The obscure information which is brought to us by mythology and legend from the primeval ages of human society gives an unpleasing picture of the father's despotic power and of the ruthlessness with which he made use of it. Kronos devoured his children, just as the wild boar devours the sow's litter; Zeus emasculated his father and made himself ruler in his place. The more unrestricted was the rule of the father in the ancient family, the more must the son, as his destined successor, have found himself in the position of an enemy, and the more impatient must he have been to become ruler himself through his father's death.

Even in our middle-class families, fathers are as a rule inclined to refuse their sons independence and the means necessary to secure it and thus to foster the growth of the germ of hostility which is inherent in their relation. A physician will often be in a position to notice how a son's grief at the loss of his father cannot suppress his satisfaction at having at length won his freedom . . .

Occasions for conflict between a daughter and her mother arise when the daughter begins to grow up and long for sexual liberty but finds herself under her mother's tutelage. This is patent to the eyes of everyone. But it does not help us in our endeavor to explain dreams of a parent's death in people whose piety toward their parents has long been unimpeachably established. Previous discussions, moreover, will have prepared us to learn that the death-wish against parents dates back to earliest childhood.

This supposition is confirmed with a certainty beyond all doubt in the case of psychoneurotics when they are subjected to analysis. We learn from them that a child's sexual wishes – if in their embryonic stage they deserve to be so described – awaken very early and that a girl's first affection is for her father and a boy's first childish desires are for his mother. Accordingly, the father becomes a disturbing rival to the boy and the mother to the girl; and I have already shown in the case of brothers and sisters how easily such feelings can lead to a death-wish.

The parents too give evidence, as a rule, of sexual partiality: A natural predilection usually sees to it that a man tends to spoil his little daughters, while his wife takes her sons' part, though both of them, where their judgment is not disturbed by the magic of sex, keep a strict eye upon their children's education. Being loved by an adult does not merely bring a child the satisfaction of a special need; it also means that he will get what he wants in every other respect as well. Thus he will be following his own sexual instinct and at the same time giving fresh strength to the inclination shown by his parents if his choice between them falls in with theirs.

The signs of these infantile preferences are for the most part overlooked; yet, some of them are to be observed even after the first years of childhood. An 8-year-old girl of my acquaintance, if her mother is called away from the table, makes use of the occasion to proclaim herself her successor: "I'm going to be Mummy now. Do you want some more greens, Karl? Well, help yourself, then!" A particularly gifted

and lively girl of 4, in whom this piece of child psychology is especially transparent, declared quite openly: "Mummy can go away now. Then Daddy must marry me and I'll be his wife." Such a wish occurring in a small child is not in the least inconsistent with her being tenderly attached to her mother.

If a little boy is allowed to sleep beside mother when father is away from home but has to go back to the nursery and to someone of whom he is far less fond as soon as his father returns, he may easily begin to form a wish that his father should *always* be away, so that he himself could keep his place beside his dear, lovely mother . . .

In my experience, which is already extensive, the chief part in the mental lives of all children who later become psychoneurotics is played by their parents. Being in l with the one parent and hating the other are among t essential constituents of the psychical impulses which a formed at that time and which are of such importance determining the symptoms of the later neurosis. It is a my belief, however, that psychoneurotics differ sharply this respect from other human beings who remain normal that they are able to create something absolutely new a peculiar to themselves. It is far more probable – and th is confirmed by occasional observations on normal childr – that they are only distinguished by exhibiting on a magn fied scale feelings of love and hatred to their parents wh occur less obviously and less intensely in the minds most children. ◆

JUNG'S Approach to Personality

by Joan Corrie

CARL JUNG is a Swiss psychiatrist and one of the original members of the psychoanalytic movement. He was a practicing psychiatrist prior to becoming associated with Freud, whose work impressed him greatly, in 1908. Jung was the first president of the International Psychoanalytic Association and second only to Freud in the movement. In 1916, important differences became apparent between Freud's theories and Jung's, and Jung broke formally with the psychoanalytic group. He denied the supremacy of the sexual instinct as a motivating force in behavior and did not accept the Freudian idea that psychoneurosis is etiologically sexual. His own school, which he calls the school of "analytical psychology," is more religious and mystical in its approach than Freud's. Jung conceived of libido as a nonsexual, general psychic force and of the unconscious as being made up of personal repression and archetypal or inherited tendencies.

ACCORDING TO CARL JUNG, there are four basic functions or forms of psychic activity, namely, thinking, feeling, sensation and intuition. The kind of thinking here referred to is not passive thought which comes and goes but active or directed thought, controlled by the laws of logic.

Feeling is appreciation of values—not an intellectual judgment but one which is expressed in terms of rejection or acceptance: "I like this"; "I dislike that." Feeling is essentially subjective. It is *my* feeling, even though directed toward an object. Sometimes it is a mood—a feeling of sadness or cheerfulness. It can be mixed with sensation, as when a beautiful or unpleasant sight or sound evokes pleasure or distaste, but in its pure form feeling is a separate function from sensation. It is not emotion, though intensity of feeling results in emotion, which is always characterized by bodily disturbances.

Thought and feeling are both rational functions, since feeling valuation (when the function is differentiated), as well as intellectual judgment, proceeds according to the law of reason.

Sensation and intuition are irrational functions, since both are merely perceptual. Sensation perceives what *is* in the present moment; intuition sees what *may be* in the future. The latter is perception of possibilities. These four functions give us four different modes of approach to the world.

We all think—or believe we think—we all feel and we all have sensations and intuitions. But we have them in quite varying degree. In no one, it may safely be asserted, are the four functions equally developed. Because of natural inherited disposition and of environment, every individual adapts himself to reality most easily and most successfully by means of one function, called the "superior function." And always one lags behind, relatively undeveloped and partially unconscious – the "inferior function." Where thought is the superior function, feeling is the inferior one. Where intuition is the chief function, sensation is relatively weak and undeveloped.

Each of the four function-types above will come under a further category, that of the "extroverted" or "introverted" type. Observers of human nature have long pointed out sharp distinctions which have led them to classify men according to their temperamental differences; for example, James has described in his *Varieties of Religious Experience*

the "tough-minded" and the "tender-minded" man. But Jung has worked out in fine detail, from his long experience, two fundamentally opposite types which he calls "general-attitude" types and to which he has given the names of "extrovert" and "introvert." They are distinguished by the attitude adopted in each case toward the object. The libido, (or psychic energy, or interest) of the extrovert flows outward to the object: Objective facts or external happenings are the all-important factors of life for him. People and things and events are endlessly interesting to him, and he adapts himself easily and well to his environment. He is the man with "many irons in the fire" and is happy only when his days are full to overflowing with business or other activities. He talks fluently, makes friends readily and is in general a useful and appreciated member of society. His nature is extensive but not intensive, and, whatever else he knows, he never knows his own soul. He is eminently social and detests solitude. Any sort of self-knowledge he usually characterizes as morbid, and his moral and social values are those of his environment and time.

The attitude of the introvert is diametrically opposite. His interest is fundamentally subjective and not objective, and, for this reason, he is often considered by the undiscriminating to be more selfish than the extrovert, whose sympathies *apparently* flow out to one and all. This judgment is, however, entirely superficial. Neither introvert nor extrovert has any monopoly of selfishness.

For the introvert the significance of the object lies not in itself but in how it appears to him. It is not the situation objectively considered, but the situation *as he sees it*, that is the decisive factor. The first reaction of the introvert to the object is likely to be a negative one. Whereas the extrovert, so to speak, enfolds the world in his arms and cheerfully seeks adventure therein, full of faith in its benevolence toward himself, the introvert is never quite at home in the external world of men and things. He views it with more or less suspicion and fear and, unable to adapt easily to it, withdraws into himself, into his own inner kingdom, where he is quite at home. He not only can *endure* solitude, which would break the extrovert: A certain amount of it is actually *necessary* to his mental health and happiness. As a rule, self-expression is difficult to him, and he is apt to appear dull and uninteresting. Those who thus judge are little aware of the multitudinous activity going on within. Because of the lack of expression, introverts are frequently misunderstood.

Introverts and extroverts can never really understand each other, for their differences are polar; yet, perhaps because of that fact, they have a strange attraction for each other. This if often seen in the choice of husband or wife. Because each type is complementary to the other, such marriages are successful up to a point, the outgoing tendency of the one partner balancing the introverting attitude of the other in all matters of external welfare, but the soul union which is the essence of true marriage can rarely be attained between a typical extrovert and a typical introvert—for lack of complete mutual comprehension.

While all this is absolutely true, it is no less true that every human being extroverts, and every human being introverts. The two attitudes are like the swing of a pendulum in first one direction and then the opposite one. It is the *conscious* attitude which has been described above, and according as its preponderating habit is to flow out to the object or to withdraw from the object, we get the type.

The unconscious of the extrovert is introverted; that of the introvert is extroverted. Because the introvert consciously withdraws from the object, asserting the superiority of his ego, unconsciously the object dominates him and fills him with fear. For example, an introvert always wants to preserve his freedom of action. He hates to feel bound by circumstances to adopt a certain course. He will not take the objective factors of his life sufficiently into consideration. Because he struggles to maintain his subjective freedom against the just claims of the object, unconsciously he is apt to become riveted, as it were, by unbreakable fetters to some objective situation which assumes alarming proportions and may even fill him with panic. He gets into a "hole" and cannot get out.

In the case of the extrovert, whose conscious life is spent among objects and external events, it is his unconscious subjective life he views with suspicion and fear. He has a great resistance to introspection and prefers to know nothing about that side of himself. But an ostrichlike policy is never successful. His personal unconscious is full of repressed subjective tendencies, which from lack of expression are infantile in character. His ego, denied suitable conscious value in view of the overpowering influence exercised over him by the object, may burst forth as unconscious egotism, or some "nervous" illness may thwart his too extroverted activities. Any one-sided mode of living will inevitably give rise to reprisals from the unconscious. Jung gives several instances in his *Psychological Types* of how the unconscious can interfere when extroversion passes reasonable limits.

Each function, as we have said, can be either extroverted or introverted. In the beginning, Jung identified thought with the introvert and feeling with the extrovert, but later experience showed him there were "introverts who do not think and extroverts who do not feel."

The thinking of the extrovert is of the empirical or sometimes the intuitive kind. He orders his life in accordance with logical conclusions, arrived at through consideration of facts of objective experience or of generally accepted principles. He accumulates facts, for which he has the greatest possible respect; his thought is impersonal and constructive. He readily finds a role to fit him as natural scientist, politician, financier, advocate, ecclesiastic, architect, engineer or any line where constructive ability of an objective kind is required.

Because of the inflexibility of his intellectual judgments, when the type is extreme, he is prone to be intolerant, fanatical, even tyrannical—as, for example, a Torquemada—or, on a smaller scale, the domestic tyrant. Feeling is rigidly repressed; hence, there is scant sympathy for others unless they conform to his views of life. Mere irrational perceptions are permitted no place in his scheme of things, but, as life is never regulated by logic alone, these find a place in the unconscious. Here the one-sidedness of the conscious attitude is compensated by personal sensitiveness, infantile feelings, doubts and irrational superstitions.

When thought is the superior function of the introvert, it is subjective; i.e., it is not concerned with the intrinsic nature of the object but with the subject's own special idea of

it, which idea has birth within himself. It is the idea, not the fact, which counts. The ideas of the extrovert rise out of the objective fact, and he will seek confirmation through yet more facts. The ideas of the introvert rise from images within himself.

Such images welling up from the unconscious are the germ of the subjective ideas of the thinking introvert, and he seeks to fit the objective facts to them. If these will not altogether fit, he may even force them into the ideal mold. His thought is not merely constructive like that of the extrovert. It is theoretical, creative and sometimes mystical. Facts are collected as evidence or examples of a theory but never for their own sake. Like all introverts, he shows his worst side to the world. Feeling being repressed, he appears cold and inconsiderate. He is dogmatic and unyielding with respect to his ideas, tenacious of their validity and tactless in the manner of their presentation. Misunderstood or even disliked by those who know him least, and whom he keeps at arm's length, he is most appreciated by those who are nearest to him and who know him best.

We now come to the extroverted and introverted feeling-types. Like thought, feeling is a rational function expressing a judgment—in this case, of values. Feeling is an essentially feminine characteristic, and, as a differentiated function of adaptation, it is less frequently found in men, whose superior function is more often thought.

The extroverted feeling-type is objective; i.e., the kind of feeling induced depends entirely upon the object itself or upon generally accepted standards of valuation. He accepts or rejects, likes or dislikes, that which is commonly accepted or rejected; and finds good, true and beautiful what the judgment of his time and generation finds good and true and beautiful. Feeling, being differentiated (i.e., specialized), is under control, and he is able so to direct it as to feel what he "ought" to feel in any given objective situation. Up to a point, this makes for harmony and good feeling with the environment. The feeling-extrovert, when kindly disposed, extends a warm, easy sense of fellowship and sociability, which is very pleasant. When the type is at all extreme, the feeling shown tends to become affected and insincere. In any case, it is extensive and not intensive, for the feeling-extrovert does not feel.

This seems a paradox, but, if feeling be so centered in the object as to constitute virtual at-oneness with it, then none can be left over for the individual's own experience. Thought is relatively repressed; otherwise it would interfere with the feeling values. No one whose thinking is permitted full effect can always feel as he "ought" to feel in every situation; therefore the feeling-extrovert turns thinking overboard when it threatens his feeling valuations. It is relegated to the unconscious, where it takes on an infantile character, and, being under no control, frequently irrupts into consciousness under the guise of disturbing ideas and doubts respecting the objects—human and otherwise—upon which feeling has already passed its judgment.

The introverted feeling-type is just the opposite of the foregoing description. If one might be allowed such a metaphor, it might be said that extroverted feeling is like a wide but shallow lake over whose smooth surface the sunlight plays or which the wind lashes into sudden fury, to be followed quickly again by gentle ripples, while introverted feeling resembles a solitary mountain lake, silent, dark, mysterious, whose depth no man knows.

Such feeling is profound and intense. The individual feels all the time, but, as he cannot express it, he is frequently regarded as cold and lacking in feeling. He is rarely emotional outwardly but may be torn by emotion within. His feeling is subjective, critical and often apparently deprecatory toward the object, since it does not depend primarily on the object itself but on the individual's own valuation of it, which is frequently negative. His extreme sensitiveness causes him to withdraw from the object which has power to hurt, and he seems aloof, though in reality he may not be so.

Such a type, unable to express what he feels by reason of his lack of relatedness to objects and only succeeding in being clumsy if he attempts it, is bound to be misunderstood; this misunderstanding in turn drives him more into himself, until he may become as egocentric as he is usually—but not always with justice—considered to be.

The next two functions to be considered are irrational; i.e., sensation and intuition are not functions of judgment but of perception. The individuals in whom one or the other is the superior function do not order their lives by logical conclusions, whether of thought or of feeling. Their perception of the accidental happenings of life is their guidepost.

The extroverted sensation-type, like all other extroverts, is objective. Actual concrete objects constitute reality for him, and the amount of sensation he derives from them sums up the value of living. Sensation is, of course, a basic function. The external world comes to everyone through sense-perception, but in the type under consideration it is perception raised to its highest level. He knows no other reality but that which causes sensation and which comes to him from without. He neither thinks nor feels much consciously—he only senses. The maximum of sensation to be got out of the object is his aim in life.

He is not necessarily gross. His pleasure may be refined, and he may be a lover of beauty. But, whether sensual or refined, the strongest sensation is the greatest good, and the value of the object consists in its ability to provide this. The other functions, especially intuition, are repressed and in the unconscious take their revenge, as is always the case when the attitude is one-sided. His poor and infantile intuition causes him to attribute to others tendencies and qualities which are really within himself. The sense of reality, when pushed to an extreme in the conscious, is compensated in the unconscious by ideas, imaginations and feelings which are wholly unreal.

The introverted sensation-type stands in marked contrast to that of the extrovert. At first sight the name seems almost a contradiction in terms, since sense-perception must come from without. There is the object, and from it must be derived the stimulus which results in sight or sound. But it must not be forgotten that an object requires a perceiving subject in order to exist. It is *I* who perceive, and, if every perceiving subject were swept off the earth, then there would be no external world at all, *as we know it*, to be sensed.

The difference between the extroverted and the introverted form of this type lies in this, that the former senses the object directly, giving himself up to its influences, while the latter rather stands off from it and interposes his own subjective

perception, his own view of it, between himself and it, thus altering its character. It is, of course, well understood that no two people ever see the external world exactly alike. But the introvert, in whom sensation predominates, perceives more in the object than is actually in it. He puts into it something which does not actually belong to it but comes from his perception of it. Therefore the effect it produces on him is largely his own. It cannot be gauged by the stimulus which the object is apparently calculated to supply.

His intuition is repressed and in a sense perverted, since, when possibilities do present themselves to him, they seem dangerous or threatening in nature. Such a type appears quiet, calm, even self-possessed, but within loom all sorts of fears and fancies, due to the oversubjectivity of perception which makes the object not as it is in reality but as it appears to him.

The intuitive-types approach the world from a totally different angle from that of sensation-types. Whereas the latter perceive concrete reality as it exists at the present moment, the former see not what *is*, but what *may be*, the possibilities of the future. Sensation is like a horse with blinkers. It sees the road immediately under its nose but nothing of that which is round the corner. Intuition cannot see the road under its nose, because it is looking round the corner all the time. The two types live in different worlds. The solid facts of the sensation-type are uninteresting, even boring, to the intuitive, and the possibilities which are so full of life and promise to the latter are as bubbles filled with air to the former. Little chance there is of a mutual understanding.

The extroverted intuitive-type is always on the lookout for possibilities in the external situation; his perception is not subjective. Anything new fascinates him. New ideas, new situations, new people—all offer the new possibilities which this type craves and, indeed, cannot exist without. His mind is constantly perceiving new combinations and alterations of existing reality in accordance with the possibilities he sees ahead. In his business or profession new vistas are constantly opening out before him. When the type is a woman, she is alive to all social opportunities and possible advantages.

These perceptions are of the utmost value for life, but that which is already existing is also of value, and the tragedy of the extroverted intuitive lies in the fact that he discards the present value for the future possibility. If one is always leaving the good which *is* for the good which *may be*, one may sometimes find it is the shadow which has been grasped and not the substance, as in the well known fable.

Sensation, being the opposite of intuition, is weak and unconscious in this type. Thought and feeling are never allowed to interfere with possibilities. The extroverted intuitive type is apt to show little consideration for other people, not because he is unkind, but because he does not see their need of the moment. The unconscious asserts itself by giving rise to inferior ideas and feelings and by compulsory ties of some sort to people, places or things, thus balancing in a childish way the restlessness of the conscious.

The introverted intuitive is not concerned with external facts. His perception is subjective and focused upon the images he finds in the unconscious. His sight is turned within, and there he finds the material necessary for his vision. To those around him he seems to have his head in the air and no solid ground beneath his feet. To himself the images have as great an objective reality as those of the external world to the extrovert. Indeed, in some cases they may even become externalized and take on a visible form.

If the type is an artist, his work will be fantastic in nature, strange and unpleasing to a rational type. Anyone who has seen the Wiertz pictures in Brussels will recall the prodigality of fantastic imagery used to express the painter's vision. Or the images may take a commanding tone and relate themselves to future events, as in the case of an Isaiah or a Jeremiah. These seemed to their contemporaries to have their heads in the air. For the introverted intuitive, sensation is almost abolished. Jung tells of a patient he once had of this type who, when he asked her half-jokingly if she had never noticed that she had a body, replied with all seriousness that she had not! "She had ceased even to hear her steps when she walked – she was just floating through the world." Naturally this is an extreme instance.

The question may perhaps be asked: Cannot introverts and extroverts deliberately try to alter the innate tendencies which, when extreme, prove to be disabilities? The answer must be that the type remains the same, for it is fundamental, even biological, "because of some unconscious instinctive cause . . . Nature knows two fundamentally different ways of adaptation which determine the further existence of the living organism; the one is by increased fertility, accompanied by a relatively small degree of defensive power and individual conservation; the other is by individual equipment of manifold means of self-protection, coupled with a relatively insignificant fertility. This biological contrast seems to be not merely the analogue, but also the general foundation, of our two psychological modes of adaptation."

Occasionally, as a result of early training, a falsification of type may take place, the child being twisted against its nature into the opposite type, but the penalty paid is almost certain to be a neurosis in later life.

When, however, the type is extreme, much can be done in suitable cases to reach individuation (a better balance of all four functions) by the method of psychological analysis. By revealing his unconscious tendencies to the extrovert, it teaches him to introvert and find values within himself, and by the same means the introvert learns to adapt himself with greater ease and better result to the outside world. Each needs to be guided in a different direction—the introvert without and the extrovert within himself. But no person is qualified to attempt the difficult and delicate task of analyzing another person's mind until his own has undergone a searching analysis at the hands of an expert.

It must be thoroughly understood that in the very slender outline of the characteristics of the various types given above, it is the *pure* type that has been described. In concrete cases there are individual traits which modify these characteristics, which latter also exist in varying degree. It is necessary to emphasize this, as an idea seems to prevail in some quarters that introverts and extroverts are alike morbid specimens of the race.

It is not so. They are the ordinary humanity we talk with, do business with, live with all our lives, and we must place ourselves in one or the other of these categories. ♦

ADLER'S Approach to Personality

by W. Beran Wolfe

ALFRED ADLER (1870-1937) was a Viennese eye specialist and psychiatrist prior to becoming associated with Freud and the psychoanalytic movement in about 1906. He was, along with Brill, Ferenczi, Jones, Jung, Stekel and others, a member of the group that met with Freud in 1908 as the first International Congress of Psychoanalysis, but subsequently he disagreed with a basic principle of the Freudian school. In 1911 he resigned to form his own following – the school of "individual psychology." Against Freud's theory that human motivation is explainable largely in terms of the sex instinct, the Adlerians hold that man's behavior is rather the result of his struggle for power and self-assertion, the compensation for an inherent feeling of inferiority common to all human beings. In later life, Adler practiced and studied in the United States.

THE CONCEPT of the unity of the human personality, which is the foundation of individual psychology, is neither new nor unique to Alfred Adler's psychology. If each human being were no more than the haphazard resultant of the blind interaction of imponderable energies, a systematic psychology would be as impossible as a science of chemistry in which the chemical elements changed their valence from day to day. Great poets, shrewd old women, novelists, successful generals and businessmen know that this unity of the human organism is the *sine qua non* of human understanding.

The second great principle of Adler's psychology is that the unit organism is a dynamic whole, moving through a definite life pattern toward a definite goal. "The goal of life is the maintenance of life," as Rémy de Gourmont wrote in his *Physique de l'Amour*. It is this goal which differentiates living matter from dead matter. A sand pile has no goal; if you remove a few shovelfuls of sand, its essential nature is not changed; it remains a sand pile. But a living organism, be it a one-celled amoeba, a hummingbird or a giraffe, has a goal of life, and its entire organization and way of life are appropriate to the attainment of that goal. You cannot remove an essential portion of a living organism without changing it into an amorphous congeries of inert cells.

Each living organism has a definite life pattern and a definite and characteristic technique of combating the environment in order to maintain its life and goal. The complexity of the pattern varies with the organism's capability of change and adaptation, and for this reason the patterns of human behavior are much more complicated than the patterns of an oak, a comparatively immobile and fixed organism. What we call soul, or psyche, in a purely biological sense, is the function of adaptation, of apperception, of the mobilization of resources and the maintenance of life by an offensive-defensive strategy of living.

JUST AS every living species has its characteristic technique of self-preservation, so the human race has its characteristic method of self-preservation. This technique we call communal life, society, civilization. So far as archaeological research can determine, human beings have always lived in groups.

The fate of the individual is inextricably linked with the fate of his group. This is a fundamental principle of Adler's individual psychology. To understand a human being you must understand his relative situation in the human group in which he moves. He cannot be isolated in a laboratory and watched, as has been attempted by the behaviorists, because in the moment he is isolated he no longer acts as a human being but as a caged animal. And just as a pine develops differently at the snow line from the way it does in a sunny valley, so the human being will act differently if his social environment is changed.

The social life of the human race is an outgrowth of its weakness. Communal existence was probably the quickest and most effective way our ancestors could find to protect themselves. The pattern of the human race has been a pattern beginning in individual weakness, moving toward a goal of comparative security in social solidarity. All the strengths of the human race fit into this pattern; all its weaknesses are derived from the danger of isolation. Just as in our structural growth we recapitulate the evolution of all living matter, from a single cell to an organized unity of interdependent tissues and organs, so the psychological growth of the individual is a recapitulation of the psychological organization of the race.

Every human being begins life as a relatively helpless, impotent, dependent parasite. Without the aid of his parents, the first community of the family, the human infant would perish miserably in a few hours. Under the fostering influence of parents the individual child grows in power and ability. During his growth he is a virtual parasite of the society that nurtures him.

With maturity the normal individual has developed adequate powers to begin life as a contributing member of his social group. In affirming the multiplex bonds that bind human being to human being, the normal mature individual gains a measure of peace, security and a sense of totality and validity which make life worth living. The more of these bridges that a human being builds to his fellows, the more secure he is. Speech, common sense, reason, logic, ideas, sympathy, love, science, art, religion, politics, responsibility, self-reliance, honesty, usefulness, play, love of nature etc.

are among the most important bridges. To forego any of these techniques of communal life is to be only partially successful as a human being, to be only partially secure.

Unfortunately for us this normal pattern of development does not always occur. The reason for its failure derives from an important biological characteristic of the human infant. The young of other species also go through a period of helplessness and dependence upon their parents, but, as their physical powers grow, a parallel development of their mental capabilities occurs. A kitten that is capable of recognizing a mouse can stalk it, catch it and eat it. But the young child realizes his relative weakness, can recognize the fact that he is dependent upon his mother for food and warmth and protection. The human baby is the only living animal that experiences his own inadequacy, for his mind develops faster than his body. It is in this situation that the feeling of inferiority, a cornerstone of individual psychology, is created.

Far from being a handicap, the inferiority feeling has proved itself the most cogent stimulus for the development of the human race. The telescope and the microscope would never have been invented if our human eyes were as powerful as the eagle's. The very structure of our civilization, from newspapers to skyscrapers, from airplanes to symphony orchestras, from steam shovels to silk stockings, is the resultant of this primitive need for the compensation of human frailties.

Each human being is capable of elaborating his personal defects into a useful contribution to society; yet a superficial survey of our society indicates that only a small proportion of the human race has gained the courage to effect such compensations. Our neurotics far outnumber our geniuses. How can we account for the failure of useful compensation?

Unfortunately for the human race, a variety of factors militate against the optimum compensation of the inferiority feeling in social adjustment and in useful work. The first of these factors that intensify the inferiority feeling until it crystallizes in an inferiority complex is the factor of physical defect. If, in addition to his normal weakness, the human infant experiences a special weakness in the form of a defective apparatus, his struggle for significance is made more difficult. This inferiority may be an actual inferiority of certain organs or organ systems of his body. It may, however, be a minor physical anomaly, medically unimportant but socially embarrassing, such as abnormal fatness, thinness, albinism, warts, bow legs, facial hair etc.

The second group of factors that intensify the inferiority feeling deals with the social, religious and economic condition of the individual. Members of any minority group, whether social, religious or economic, suffer an accentuation of their inferiority feeling because of the additional difficulties of the world – contact with sordidness, vice and crime. Great riches, however, may also have a disastrous effect because the proper stimulus to work is so frequently lacking if a child grows up in an atmosphere of affluence.

A third set of factors that may intensify the inferiority feeling of the child derives from his family constellation. This group is important because no child escapes its influence. The only child derives his inferiority complex from his abnormal importance in the family and his poor training for social adjustment. His life is all too frequently a search for the lost paradise of his youth.

An older child, having been an only child, and displaced by a younger rival, may be so discouraged by his fall from power that he can never muster sufficient courage to attack the problems of existence objectively. The second child, although he grows up in the same house, imbibes the same milk, sleeps in the same room as the older child, nevertheless has an entirely different environment. He has always a pacemaker ahead of him and, in his aggressive striving to overtake the older child, may overshoot his mark and become an unobjective rebel.

The youngest child may shrink in fear of competing with the more successful older children. The only boy in a family of girls, the only girl in a family of boys, may be discouraged because of this unique position. While no position in the family is without its dangers, it is one of the most important teachings of individual psychology, the first science to point out the significance of the ordinal position of the child in the family constellation, that no position can *compel* a child to become neurotic.

Sex in itself may be a factor that complicates the burden of the child. We live in a civilization dominated by a masculine ideal, a civilization that exaggerates masculine values and activities and still considers, despite good scientific evidence to the contrary, that woman is an inferior sex. The utter fallacy of the prejudice has been exploded by the microscope and the machine, but it exists in widespread tradition nevertheless. Every girl child therefore has an additional burden of proof thrown upon her shoulders. The fact that she is "only a girl" often precludes a normal development along lines of her choice.

The prejudice in favor of the males, however, is not without damage to them. Many a boy is terrified, either by minor physical defects or by other discouraging factors, until he doubts his ability to be a "hundred-percent he-man" and spends the rest of his life avoiding the implications and responsibilities of his sex.

The normal course of human development may be divided into two phases: an earlier phase of individuation, with growth of the individual at the expense of the environment, and a secondary phase of communal adjustment, marked by the continuation of individuation in terms of social contribution. A child does not grow naturally into the second phase without a certain reconciliation with his adult environment and without a proper initiation into the fellowship of mankind. This initiation is usually accomplished by the intermediation of the child's mother.

A child's mother is the first person with whom the child makes a social contact. Mother's love is the first social approval. As soon as a child realizes that he is appreciated by one other human being, he has begun the process of social adjustment. In his mother (and she need not be his blood mother) he experiences the first wholly trustworthy individual in his evironment, and with this beginning he can continue his progress toward the normal goal of human adjustment.

It is apparent that the mother has a double function, whose first phase is the reconciliation of the child to his situation in the world, whose second phase consists in encouragement

of the child to develop his own powers of growth and adjustment to other individuals. This delicate role is seldom played to perfection, and in the mistakes of a child's mother the infinite variety of human patterns may take their origin. There are several typical mistakes, all of which produce easily recognizable types of "problem" adults.

Although children are no longer treated so brutally as they have been in the past, there are nevertheless many mothers in this selfish age who either neglect their children or actually hate them. Illegitimate, ugly or unwanted children often develop antisocial character traits because their guardians have not interested or reconciled them with the world in which they live. It is not strange that many criminals are recruited from the poorer sections of the population, where such neglect and such hate, together with the poverty that leads to ugliness and disease, flourish most widely. These children learn courage and independence in the gutter, but their courage is always the false courage of rebellion against society.

A far more common type is the spoiled and pampered and solicitously coddled child who basks in the tropic warmth of a fostering but psychically murderous mother-love throughout the first years of his life. More mothers overdo than underdo their first function of reconciliation. They prove themselves so indispensable to the child that the child never develops the ability to think and act for himself.

In some respects the pampered child assumes an attitude toward the world of men almost identical with that of the hated child. He too is an enemy alien – one who was met by a fanfare of trumpets, only to be betrayed as he grows older, only to realize that his cordial reception bears no relation to the tasks before him. Naturally both hating a child and pampering a child increase his sense of inferiority and complicate his future adjustment. Perhaps in our modern civilization this emotional overemphasis of the child's helplessness is the most potent cause of mistaken patterns of life.

PATTERNS OF LIFE are usually fixed by the time a child is 5 or 6. A definite set of situations, giving a specific and characteristically individual tinge to the inferiority situation of each child, expresses itself in a characteristic goal in life, which is often crystallized in a phrase-formula. Unless the individual gains insight by later education or by an abrupt change of conditions, this pattern of conduct – between the first inferiority situation and the final crystallized goal of what seems security, totality, superiority – continues as an unchanging, dynamic, unified stream.

It is only rarely that an individual learns from his experiences. One can learn from experiences, change one's pattern, only if one has previously learned the art of being objective about oneself. This art is seldom learned spontaneously – it derives usually from some external influence or education. The great majority of human beings make their experiences fit into their patterns. Unconsciously they so live that the appropriate experiences occur. After a fashion our experiences are predestined by the nature of our childhood inferiority situation and its fictional compensation in the consequent goal of life. Only that individual who has learned to understand completely the pattern of his own life, who can change his goal if necessary, who realizes the bad and the good in his own conduct, can be said to be the master of his fate and the captain of his soul.

Once the goal of superiority has been crystallized, each individual proceeds toward its attainment as directly as the obstacles of reality permit. Toward this end each one of us chooses a kit of appropriate tools and a scale of appropriate values. We call these tools character traits – and the whole kit, the personality. A human personality may be considered the sum total of the instruments and devices which any individual has chosen to attain his life goal.

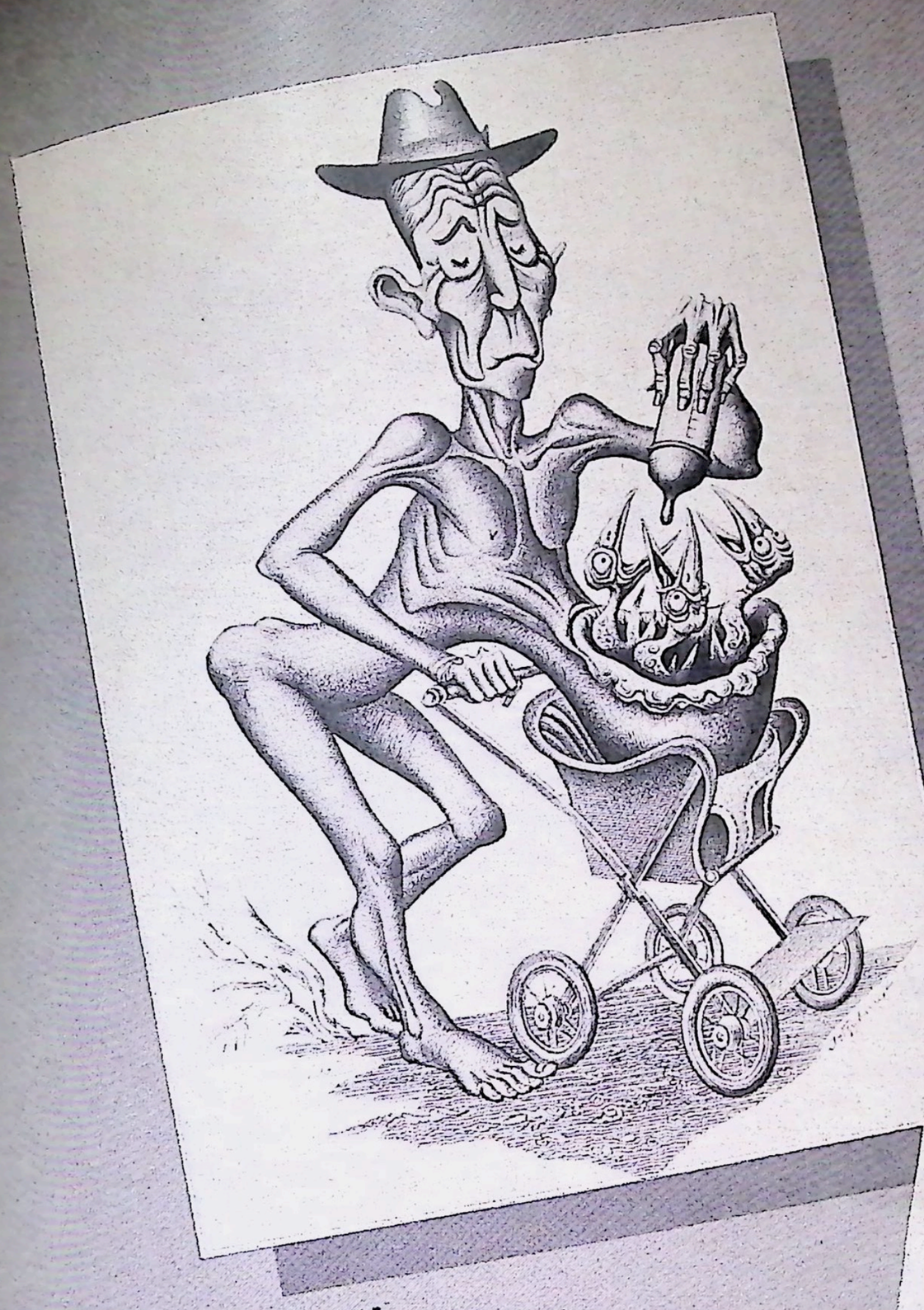
The characteristic instruments which an individual chooses vary with his physical constitution, his environment, the age in which he lives and the resistance he meets. Thus we have patterns of life as different as the aggressiveness of the go-getter and the submission of the saint. Mussolini and Gandhi might have been striving for the identical goal – time and environment forced them to choose unrelated means.

A protesting child who feels overpowered by the artificial authority of an overbearing parent is quick to search out the psychological weaknesses of that parent and strike at the Achilles' heel of the parent's pattern. Specially well developed talents in an older brother may lead to the choice of another sphere of activity in a younger brother who fears to compete; he must, in deprecating the model of the first child, develop his sense of security and totality along the only path that remains to him.

In this way each individual builds up a scheme of apperception with which he tests all his experiences. It is this artificially developed scale of values which he applies to every experience that he meets. In this we find an explanation of the diverse consequences of the same experience to a number of individuals. To use another analogy, we have war making brutes out of some, neurotics out of others, ardent and active workers for world peace of still others, while some, because of the nature of their life patterns, remain entirely untouched by their experience.

INDIVIDUAL psychology is a relative and comparative science, not a normative body of laws. There is no categoric imperative, no panacea for all ills, no simple formula for personal salvation. Yet it is desirable to outline a *relative* norm, appropriate to our times, with which we can compare the behavior of those whom we call neurotics, criminals and psychotics. If we were to dare to outline a normal, it would be the pattern of an individual whose goal in life was to be a complete human being, compensating for his personal weaknesses and the experiences of his childhood by some socially valuable, productive work.

Such a human being would develop the traits of honesty, sincerity, responsibility. As he grew older his social connections would become more extended, his usefulness wider, his poise better, his courage greater. He would be independent in action and judgment and service, but his activities would be dominated by the social need of his time. What vanity and ambition were left unresolved in his struggle for significance would be impressed into his technique of contributing to the commonweal. He would regard members of the opposite sex as honored fellow workers and equitably divide the labors, as well as the prerogatives, of life with them. ♦



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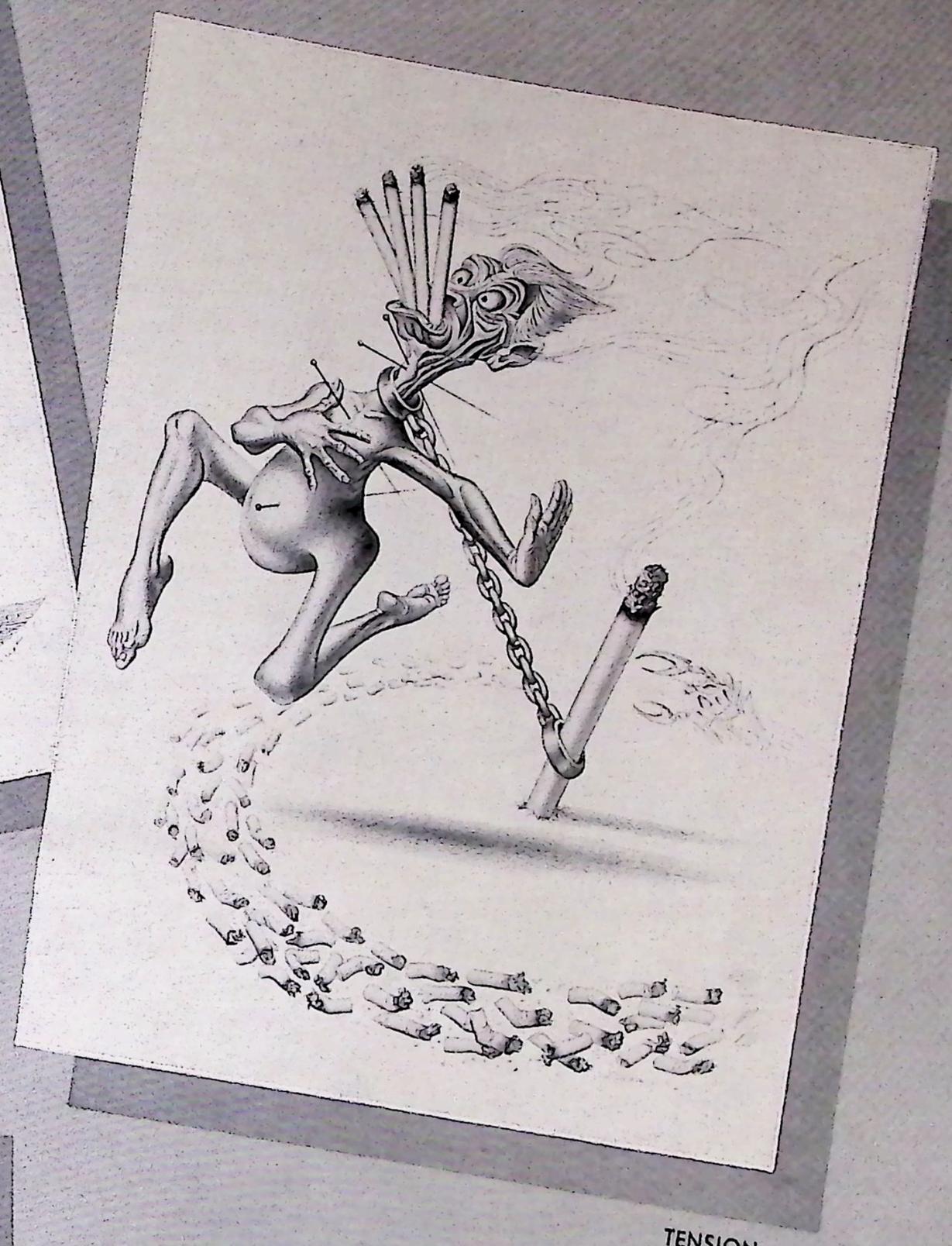

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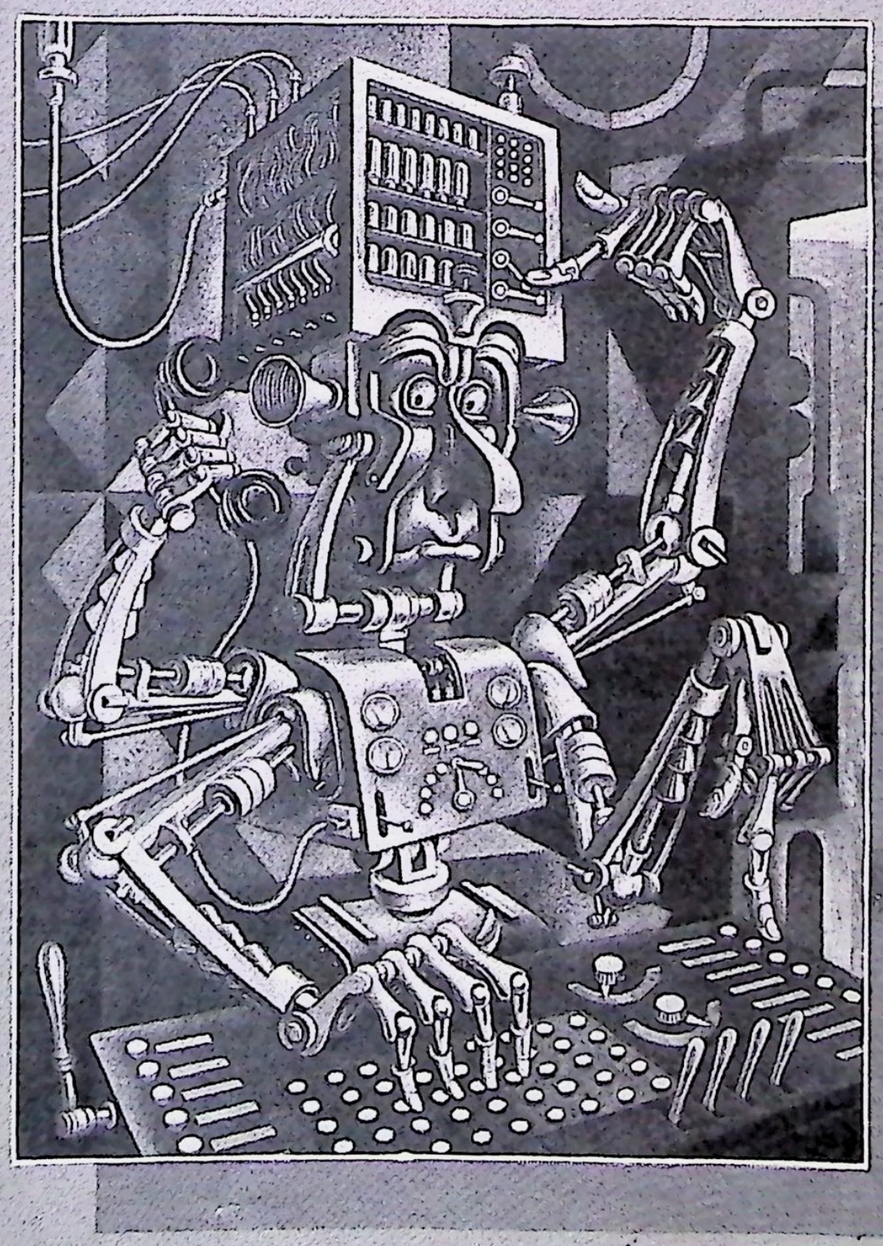


MENTAL PRESSURE

INTELLIGENCE and CREATIVE THINKING

The MEANING of INTELLIGENCE

by David Wechsler

INTELLIGENCE is the aggregate or global capacity of the individual to act purposefully, to think rationally and to deal effectively with his environment. It is global because it characterizes the individual's behavior as a whole; it is an aggregate because it is composed of elements or abilities which, though not entirely independent, are qualitatively differentiable. By measurement of these abilities, we ultimately evaluate intelligence. But intelligence is not identical with the mere sum of these abilities, however inclusive.

There are three important reasons for this: (1) The ultimate products of intelligent behavior are not only a function of the number of abilities or their quality but also of the way in which they are combined, i.e., upon their configuration. (2) Factors other than intellectual ability, for example those of drive and incentive, enter into intelligent behavior. (3) Finally, while different orders of intelligent behavior may require varying degrees of intellectual ability, an excess of any given ability may add relatively little to the effectiveness of the behavior as a whole. It would seem that, so far as general intelligence is concerned, intellectual ability as such merely enters as a necessary minimum.

Thus, to act intelligently, one must be able to recall numerous items, i.e., have a retentive memory. But beyond a certain point this ability will not help much in coping with life situations successfully. This is true of even more important capacities, such as the ability to reason, particularly when specialized. The unusual reasoning abilities of the mathematician are more highly correlated with the thing that we ultimately measure as intelligence than is sheer memory, but possession of this ability is no surety that behavior as a whole will be very intelligent in the sense defined above. Every reader will be able to recall persons of high intellectual ability in some particular field whom they would unhesitatingly characterize as below average in general intelligence. ♦

The Beginning of INTELLIGENCE TESTS

by Norman L. Munn

SOME OF THE EARLIEST of "mental tests" were devised and used in studies of individual differences among college students. They involved measurements of speed of reaction, sensory keenness, memory and various other relatively simple psychological processes. Interest was primarily in noting the extent of individual differences. There was no attempt to diagnose the level of intelligence in particular individuals. The tests were put to no practical use.

As early as 1896, however, a French psychologist named Binet, who had been studying psychological processes in schoolchildren, suggested the creation of special classes for those children who, because of low intelligence, were unable to progress as fast as others. Eight years later, Binet was asked to serve on a commission formed for the express purpose of discovering which children in the public schools had sufficient intelligence to profit from the usual instruction. Obviously it would be impossible, without doing an injustice to many children, to segregate them on the basis of teachers' judgments. Teachers would almost surely have prejudices and be subjected to various influences from parents and others. They could not be relied upon to make objective judgments. What was needed was a set of objective tests, tests which would measure the intelligence of all children on a strictly comparable basis without the influence of teachers and parents. Binet felt that a graded series of psychological tests could be devised which, like a metric measuring device, would indicate the level or degree of each child's intelligence.

By experimenting with children who were making average progress in school, Binet and a collaborator named Simon determined which of many attention, memory, discrimination and other tests could be performed by average individuals. He devised a scale comprising 30 tests arranged from the simplest to the most complex. By applying the scale to individuals known to be feeble-minded, Binet and Simon were able to obtain norms for these. They determined, in other words, how many tests in the average scale could be done by idiots and other individuals classified as feeble-minded.

By applying their intelligence test to schoolchildren, Binet and Simon attempted to discover each child's mental development. If a child of 5 did only the first nine tests in the scale, the tests performed by a normal 3-year-old, he was obviously retarded about two years. If a schoolchild failed to go beyond the first six tests, those passed by idiots, he was designated an idiot. As Binet and Simon put it, they

wished "simply to show that it is possible to determine in a precise and truly scientific way the mental level of an intelligence, to compare the level with a normal level and consequently to determine by how many years a child is retarded."

There were many defects in their original scale; hence Binet and Simon eventually devised improved scales. The chief differences between the first Binet-Simon scale and the final revision were: (1) an increase in the number of items (there were 30 items in the original scale; the final scale contained 54 items; (2) an attempt to eliminate all items which would require special schooling for their performance (Binet realized that, if the test were to measure *ability to acquire*, and not merely information, it must comprise items which any normal child, regardless of whether he had received training in special fields of knowledge, could be expected to perform); (3) arrangement of the items in age groupings (there were definite tests for various age levels from 3 years to adulthood).

The test items to be used at a particular age level were not decided upon in an arbitrary fashion. They were tried out on individuals at different age levels. For illustrative purposes, let us consider the items at age 5. These comprised weight discrimination, copying a square, repeating a sentence of 10 syllables, counting four pennies and fitting together the halves of a divided triangle. Each of these items was included at this age level because the average 5-year-old could do it.

More specifically, Binet and Simon proceeded somewhat as follows: An item was regarded as adequate for testing 5-year-old intelligence if from about 60 to 75 percent of children at this age were able to perform it accurately, if less than 60 percent of 4-year-olds could do it correctly and if it was mastered by more than 75 percent of 6-year-olds. In other words, the item had to be too difficult for the age level below and too easy for the age level above in order to be included at the intermediate level.

In line with their arrangement of the scale into age groupings, Binet and Simon developed the concept of *mental age*, or M.A. Any child who could do the 5-year tests, but could not go on to the 6-year level, was credited with a mental age of 5 years. The child of *chronological* age (C.A.) 5 who achieved an M.A. of 5 was, of course, regarded as having average or normal intelligence. However, the child with an M.A. of 5 might actually be 10 years old (C.A., 10 years). He would, of course, be extremely dull for his age. On the other hand, a child with an M.A. of 5 and a C.A. of 3 would be extremely bright. The concept of M.A., therefore, indicated the level of intelligence achieved, but it gave no indication of the brightness or dullness of the individual concerned. A person is not regarded as bright unless we know that his level of performance is better than others of his own age. He is not thought to be dull unless his performance is below that of others of his age. ♦

IQ: Intelligence Quotient

by Wendell W. Cruze

SINCE THE MENTAL AGE (M.A.) does not tell how bright or dull an individual is, it does not tell us all we want to know about his intelligence. The intelligence quotient, or IQ, so named by Terman, provides us with this additional information. The IQ is obtained by dividing mental age by chronological age (C.A.) and multiplying by 100; i.e., IQ=MA (100). The multiplication does away with decimals and allows us to express the IQ in whole numbers. If individual *A* is 12 years old and has an M.A. of 9, his IQ will be 75, while individual *B*, 6 years old, with a mental age of 9, will have an IQ of 150. Obviously, individual *B*, who has achieved the same amount of mental ability in six years as individual *A* has achieved in 12, is the brighter of the two individuals. The average child will achieve an M.A. of 9 when he is 9 years old, and his IQ will be 100.

Idiots, imbeciles and morons are all feeble-minded. The idiot never learns to avoid the common dangers of life. Some never learn to walk, talk or dress themselves. They spend their lives in institutions—individuals with adult bodies and the minds of 2-year-olds. Imbeciles learn to walk and talk. They even learn to do very simple tasks under close supervision and, as adults, achieve the mental ability of a 6- or 7-year-old.

The moron can learn to read and write; in fact he may be able to complete the work of the elementary school, although it is likely that he will have to repeat one or more grades. As an adult, he will achieve the mental ability of a child of 11 or 12 and, accordingly, will require adequate supervision if he is to keep out of trouble. Nevertheless, many morons have found occupations well within the limits of their ability and are productive, self-supporting citizens.

LEVELS OF INTELLIGENCE

LEVEL	STANFORD-BINET IQ RANGE
Idiot	0-25
Imbecile	26-50
Moron	51-70
Borderline	71-80
Low normal	81-90
Normal	91-110
Superior	111-120
Very superior	121-140
Near genius or genius	141 and over

At the upper end of the scale of intelligence we find the superior, very superior and genius. These individuals are capable of becoming outstanding successes in college or

university work and, in later life, in the various professions. This unusual ability is generally apparent in early life and remains so throughout life. These people become leaders in science, art, music, literature etc.

The IQ has come into almost universal use as an indicator of the rate of mental development. However, certain limitations of this concept should be mentioned. In the first place, IQs computed from group tests of intelligence are always open to question, since the M.A.s must be derived from the raw scores in an indirect way. In the second place, individual tests of intelligence have been developed so that the items included in one year level represent the growth achieved by the average individual in one year.

It is relatively easy to standardize items for the early ages but becomes increasingly difficult after the age of 12, largely because withdrawals from school make it practically impossible to obtain a representative sample of older individuals for use in standardizing the various items. In fact, this difficulty was so great that in calculating the Stanford-Binet IQs of individuals older than 13, the actual chronological age is not used. From 13 to 15, the divisor gradually increases, and a divisor of 15 is used for all individuals over 15 years of age.

Since the Stanford-Binet IQ for adults is not so reliable as it is for younger individuals and since most adults are tested with group tests of intelligence anyway, the practice of using IQ as an indicator of adult intelligence is seriously questioned by many psychologists. They advocate the use of centile ranks in the place of the IQ. The centile rank merely indicates the percent of other individuals of similar status who make scores above or below the individual's score.

For example, a freshman entering college may make a raw score of 115 on the group test of intelligence given to all entering freshmen. Reference to the table of norms indicates that this score receives a centile rank of 92. This means that eight percent of college freshmen make a score higher than his, while 92 percent will fall below his score. We may predict with confidence that this indivdual has the capacity for achieving success in college. On the other hand, had his centile rating been 10, we could predict that his chances of completing a college course successfully are too low to justify the expenditure of time, energy and money required. The centile rating, then, is a more practical indicator of adult intelligence than the IQ, despite the fact that the IQ is a term that is much better known, particularly among college students and their parents. ◆

THE THINKING PROCESS

by Ernest R. Hilgard

MAN IS A THINKING ANIMAL, far superior in this respect to his nearest relatives among the lower animals. Much of his thinking is practical and helps him to solve his everyday problems through understanding. Science, as organized problem-solving, is a highly successful method of practical thinking as well as a method for obtaining dependable knowledge.

Scientific discovery is a complex social process in which what any one man contributes depends in part upon the contributions made by others and in part upon his own ability to strike out in new directions. Scientists report in their own work a period of preparation, followed occasionally by sudden illumination after a period of incubation. They finally verify their work by making logical deductions from accepted principles and by checking their predictions through experiment.

The work of creative artists, so far as the steps in thinking are concerned, is not very different from that of scientists. While the end result for the scientist is an objective, factual statement, the end result for the artist is a product that communicates values or emotions. Thus, though the goals of scientific and artistic work differ, many of the thought processes which scientists and artists experience are similar.

Thinking of a less controlled sort goes on in reveries, daydreaming and the dreams of sleep. In both daydreams and night dreams, free association accounts for much of the content, but both have central themes determining the direction of association and some of the content. Both are influenced by the needs of the individual and hence represent autistic thinking. We distinguish between the manifest content of a dream (its superficial characters and plot) and its latent content (its meaning in terms of the motives of the dreamer).

The thinker employs the following activities or processes when he thinks: images; subvocal speech and other movements; words, signs and symbols; and abstract concepts. Concrete thinking is easier than abstract thinking, but, unless an individual can think abstractly, he is unable to think about problems that go beyond the immediate present. When he thinks abstractly, he may use any or all the vehicles of thought.

How do we distinguish thinking from habit and from perception? Thinking is distinguishable from habit because its end state is defined by a fit between the solution and the requirements of the problem, not by tension-reduction; it is reversible in a way that habit-sequences are not; and overlearned habits may interfere with the flexibility that good thinking demands. We can distinguish thinking from perception, because thinking and perception may disagree without perception's giving way to the superior objectivity of thought, and thinking may deal with contents that cannot be perceived.

Children's thinking in the first year is very practical, confined to manipulating concrete objects. Language permits great advances in thinking. As the child grows older, he assigns causes to things less because of their appearance

(phenomenistic causality) and more because of the way things affect one another (mechanical causality) as well as because of their formal logical relationships (logical causality).

Successful and unsuccessful problem-solvers differ (1) in understanding the nature of the problem, (2) in understanding the ideas contained in the problem, (3) in their general approaches to planning and carrying out the plan for the solution of problems and (4) in their attitudes toward the solution of problems.

When conditions are right, group deliberation produces more successful problem-solving than individual effort, but the superiority of the group over the individual is neither automatic nor universal. To be most effective, the group members must have the appropriate background experiences and abilities, and the group must have a leader. Studies of decision-making conferences point to several characteristics distinguishing successful from unsuccessful ones.

The more successful conferences worked on urgent problems leading to solutions that the group had power enough to enforce, by contrast with conferences working on more remote problems about which they could only recommend action. Members showing self-oriented needs reduced the effectiveness of their conferences in several ways: They reduced the total productivity of their groups as judged by effective decisions reached; they reduced the satisfaction of the total group membership with the course of deliberations; and they left the group members residually dissatisfied with such decisions as were arrived at by the group. ♦

CREATIVE THOUGHT

by Donald M. Johnson

CREATIVE THOUGHT and reasoning are similar in that both are directed toward a goal, in contrast to the free, undirected play of thought in reverie. (Creative thought, creative imagination, productive imagination and productive thought – all have about the same meaning.) The differences between reasoning and creative thought are in outcome and procedure. Thinking is usually called creative if the outcome is original. Originality has both a personal and a social definition, of course, for many a man has put in much creative work on an invention, song or merchandising scheme, only to discover that someone else had done practically the same thing a year earlier.

As to procedure, the chief difference is that reasoning follows a rather straightforward course, through deep, perhaps, but well marked channels, whereas creative thought travels its own way, progressing toward the goal, if it does, by irregular and unpredictable advances. Creative activity is characterized also, more than reasoning, by incubation and illumination, two of the most fascinating phases of thought.

In spite of all the irregularities and peculiarities of procedure in creative thinking, several acute observers, of their own thoughts and others', have agreed in identifying four phases: *preparation*, *incubation*, *illumination* and *revision*. One psychologist, Catherine Patrick, has been able to obtain more or less objective evidence for these phases by asking poets and artists, as well as untrained students, to write a poem, draw a picture or plan a psychological experiment.

Preparation is the initial phase of organizing the data at hand, setting up the requirements of the problem and the production of pertinent ideas or thoughts. It usually begins as soon as one brings his thoughts to focus on a problem.

Incubation, which is often the next phase, consists of "the spontaneous recurrence from time to time of a mood or idea with more or less modification, which the subject is thinking of other topics." Many artists, scientists and inventors have testified that they often incubate an idea for months – working on it occasionally and forgetting it temporarily – before it develops into a usable product. Even when a poem is written to order, for an inquisitive psychologist, the basic ideas of the finished poem may be thought of in the first few minutes, discarded in favor of others, recalled and reworked, discarded again etc. Most creative thought, 60 to 80 percent of experimental cases, gives evidence of this sort for the phenomenon of incubation.

Illumination is the formulation or organization of the central idea, form or design on which a poem, picture, experiment or invention is based. The idea or plan, which has often been incubating for some time, may be accompanied by emotion: "Hurrah! I've got it!" It may come to mind suddenly, in a flash of insight, and mysteriously, as if it had no antecedents, but when the phenomenon of incubation and the suddenness of perceptual reorganization are recalled, much of the mystery dissolves. Nevertheless, illumination is often dramatic, a favorite of biographers of great thinkers.

Revision is the refining and polishing of the central idea, i.e., putting it into finished form. The thinker's attitude during revision is quite different and certainly less excited than during the earlier phases. He stands back and looks critically at his efforts, recalls his main purpose and his audience, looks at general effects and details. He judges the relative advantages of alternative solutions and may even calculate gains and losses. If the finished product looks good, he is done. Thought ceases. If not, the whole creative process may begin anew, or he may pick out a small part to be adjusted, polished or reworked. Any careful observer, watching an artist, poet, scientist, inventor or ingenious businessman at work, can differentiate this phase from the others if the thinker will talk about his efforts and disclose his progress to view. ♦

Factors Related to CREATIVE THINKING

by J. P. Guilford

ONE HAS ONLY TO REMEMBER the many geniuses who showed spontaneous evidences of their creative talents very early in childhood to be convinced of the importance of heredity. Mozart, composing at age 7, is the classic example. In contrast with this, think of the hundreds of boys who are trained in music for years without ever becoming composers. A crucial example has recently been cited by Meier. A boy who was born blind but gained his vision at the age of 7 showed almost immediately an unusual talent for painting, as regards both composition and the use of colors. He had had no instruction, and his home environment was rather unfavorable for encouraging artistic development.

SOME EXPERIMENTS in training children show that artistic talents can be improved to some extent. Children in a state art school in Germany, although not selected for their talent, were said to have been developed into creative individuals by special training. The secret of the improvement was thought to be the unusual freedom of expression permitted the children. In another experiment, 10 inferior and four superior children were given special training for a period of two years in "free expression and motivation." A radical change took place in their artistic abilities.

These experiments suggest that many children have more latent artistic talent than is ordinarily believed. And it is probably true that the imaginative efforts of many children are rather thoroughly discouraged by social pressure. The average child's mental life is rich with imaginative creations. Partly because he is faced with stern reality to which he must adjust himself and partly because he is shamed by his elders, he gradually relinquishes his imaginative pastimes. Those who inherit exceptional talents probably survive in the face of these discouragements, as history has shown. Perhaps not many creative geniuses of first rank have been cut short by their repressive environments, but many a child of lesser talents has been thus hampered in his development.

BECAUSE the creative person must break down old ways of thinking in order to construct the new, it has been a popular idea that only youth can be really creative. The middle-aged and those past middle age are thought to be too set in their habits of thinking. It is easy to point out creative geniuses who made their everlasting marks on the world when still quite young. One thinks of Keats, who died at 26; Schubert, who died at 31; Alexander the Great, who had conquered the world at 33; and of Christ, who had started one of the world's great religions before dying at 33.

We do not know, in these few instances, what greater contributions these same individuals might have made had they lived to a ripe old age. But we can cite comparable contributions made by others at more advanced ages. Milton began writing his *Paradise Lost* at 50. Goethe began the writing of *Faust* at 57 and wrote the last part at 82. Victor Hugo wrote *Les Misérables* at about 60. Handel's *Messiah* was composed at 56, Wagner produced his best music between the ages of 46 and 69 and Beethoven was composing his best music at the time of his death at 57. Great artists have continued to produce masterpieces when past 70. Scientists have made some of their greatest contributions when past the age of 50. Edison and Marconi were still making significant inventions when they died at advanced ages.

But these are scattered and isolated facts. They are little better than anecdotes. Fortunately, Lehman has made a systematic study of the ages at which creative geniuses have made their greatest contributions. After collecting the great contributions from various fields, he had them rated for importance by competent men in those fields. He then determined the age of the genius when his *best* contribution was made. For each five-year interval of life he found the average number of best contributions, taking into account the number of geniuses who were living at those ages. The results are summarized in the accompanying table by Lehman. In most of these fields it must be remembered that best contributions may actually come all the way from ages 20 to 80.

FIELD	NUMBER OF CONTRIBUTORS	NUMBER OF CONTRIBUTIONS	BEST YEARS
Poetry	*82*	*797*	*26-30*
Chemistry	*244*	*993*	*28-32*
Physics	*90*	*141*	*30-34*
Inventions	*402*	*554*	*31-35*
Short Stories	*220*	*1396*	*31-37*
Mathematics	*163*	*453*	*34-38*
Literature	*101*	*224*	*38-42*
Astronomy	*63*	*83*	*43-47*

These results say nothing about the productivity of creative people, i.e., how *much* they produce at different ages. Productivity continues at a high level even after the age of best contributions is passed.

A probable cause of the early age for best creations is that younger individuals work with greater abandon, and in the case of writers they usually have a message that they wish to give the world. With age come more self-criticism, conservatism and, consequently, relative dullness. ♦

Psychological STUDIES OF GENIUS

by Lewis M. Terman

IN A POPULAR SENSE "genius" is often used to designate some kind of mystical gift that cannot be explained by the ordinary laws of human nature. The scientist, of course, rejects this usage. Havelock Ellis and others have used the term as practically synonymous with eminence. Sir Francis Galton, English scientist, while employing the criterion of eminence, follows Samuel Johnson in defining a genius as one who is endowed with superior intellectual quality. This definition is essentially identical with that given in Warren's *Dictionary of Psychological Terms*, 1934, and is the one I prefer.

The *sine qua non* of genius is the ability to acquire and to manipulate concepts, the shorthand symbols without which abstract thinking cannot proceed. However, there are many levels of aptitude for concept mastery, and the question arises where genius may be said to begin. We have at one extreme Dr. Fields's laboratory rats, which required thousands of trials and a good part of their lives to learn to respond to triangularity in visual stimuli — i.e., to acquire one crude concept. At the other extreme are the Newtons and the Aristotles. The intermediate levels range upward through infrahuman intelligence, average human intelligence and the superior grades that permit higher and higher levels of abstraction. Any line that may be drawn to demarcate genius is purely arbitrary. Whether one restricts the term to the ablest in many millions, in a few thousands or in a few hundreds does not matter provided the facts are stated.

Another problem is that of identifying the individuals who qualify at a particular level of genius chosen for investigation. I have referred to the criterion of eminence. Unfortunately, eminence, as measured by popular acclaim or even by space in biographical dictionaries, is influenced by other circumstances than intellectual achievement. The population it affords is the result of innumerable selective factors which vary from age to age and from culture to culture. The genius who survives as such has successfully run the gantlet of premature death, the inanities of formal education, the social and ethical pressures of his immediate environment and the more general cultural influences that have given direction and content to the civilization in which he was born.

TO STUDY ONLY the biographies of historical characters gives us a one-sided picture in that it tells us nothing about the potential geniuses who failed to achieve greatness. To complete the picture it is necessary not only to investigate the life histories of eminent persons but also to inaugurate researches that will proceed in the opposite direction, i.e., we should identify early in life those individuals who are intellectually gifted, secure quantitative measures of their mental and physical traits and then follow their careers through life.

Parallel studies in these two directions were made at Stanford University. On the one hand, the mental development of 300 eminent individuals was traced backward to childhood; on the other hand, the development of more than 1300 intellectually superior subjects was followed in the forward direction from childhood to early maturity.

The research for which funds had been provided was carried out by Catharine Cox and two assistants. The first task was to select a group of eminent subjects in such a way as to avoid the bias that is sure to enter when selection is subjective and haphazard. Cox began with James M. Cattell's list of the 1000 most eminent individuals of history as determined by the space devoted to them in biographical dictionaries. Taking the 500 most eminent of Cattell's list, she eliminated from this group those born before 1450, those who belonged to the hereditary aristocracy or nobility and a few others, arbitrarily, whose eminence had little or no basis in intellectual achievement. This left 300 subjects.

Cox and her assistants combed the biographies of these subjects for data on early mental development as indicated by interests, education, school standing and school progress, friends and associates, reading, production and achievement. Special attention was given to evidence from documentary sources. The material thus assembled ran to 6000 typed pages. The evidence for each subject was then examined independently by three psychologists who were intimately acquainted with age norms of mental performance. Their task involved two things: (1) estimation of the minimum IQ that would account for a subject's childhood performances and (2) a rating of the reliability of the evidence on which the IQ estimate was based. The averages of the three estimates for all individual subjects were the primary data for this part of the study.

It must be emphasized that the IQ as reckoned is an estimate of the lowest IQ that could reasonably account for the recorded facts; the actual childhood IQs of historical geniuses are of course indeterminate.

For the entire group the estimated minimum IQs ranged from 100 to 200, with an average of 155. The average is more than three standard deviations above the mean of the generality (100). Low estimates in the range of 100 to 120 IQ occurred only when there was little biographical information about the early years. The mean was highest for philosophers (170) and next-highest for poets, novelists, dramatists and revolutionary statesmen (160). The lowest was for soldiers (125), the next-lowest for artists (140) and musicians (145). The mean for scientists (155) was identical with the mean for the total group.

It will be understood, I trust, that IQ estimates of this kind are not to be taken too literally. For a majority of the subjects the information on which the estimates were based was far short of what could be desired. However, despite all inadequacies of the data, I believe that the author's main conclusion is warranted: namely, that the genius who achieves highest eminence is one whose intelligence tests would have identified him as gifted in childhood. The author warns us that the converse of this does not follow; we may not conclude that every child who tests high will become eminent. Her data suggest that those who do achieve greatly are characterized not only by superior intellectual ability but also "by persistence of motive and effort, confidence in their abilities and great strength or force of character."

THAT PERSONALITY TRAITS are influential in determining both the level and the direction of achievement cannot be doubted. This is certainly true of the gifted children I have studied. However, one must also take account of the part played by chance. For a given type of achievement to be possible one must be born not too far from a given time and place. It is an interesting game to try to imagine how differently any list of eminent persons might read if everyone now in it had lived a generation or two earlier or later. The soldiers would nearly all bear strange names, perhaps a majority of the statesmen, especially revolutionary statesmen, and doubtless many of the writers and scientists.

Apart from time and place of birth, there are other chance factors in vast number that are capable of shaping the life of a gifted youth. Newton at 15 had left school and was tending his mother's farm; but for the timely visit of an uncle who had attended Cambridge, it is unlikely that he would ever have received the education that made possible his great discoveries. Victor Cousin was bred in the gutter and was illiterate at the age of 10, when he happened to befriend a bully's victim in a street fight, with the result that the latter's mother sought him out and gave him an education. Faraday left school at 13 and at 14 was apprenticed to a bookbinder. It was the reading of an article on electricity in an encyclopedia given him to bind that first stimulated his interest in science. Even this would probably have got him nowhere had not Humphry Davy been near to help.

IN A STUDY like that of Cox, special interest attaches to certain eminent persons who have been cited as examples of childhood backwardness. In every one of these cases the facts clearly contradict the legend. Goldsmith was characterized by Samuel Johnson as "a plant that flowered late," and a childhood teacher said of him in her old age: "Never was so dull a boy." Actually Goldsmith was writing clever verse at the age of 7 and at 8 was reading Ovid and Horace. His IQ was probably 140 or higher. Sir Walter Scott is said to have been a dunce when he attended the Musselburgh School. The facts are that he never attended this school, that when only 7 years old he read widely in poetry and in his prose at this age used correctly such words as "melancholy" and "exotic," that by age 10 he had collected a small library of ballads and that at 13 he lay awake nights reading Shakespeare when he was supposed to be asleep. His IQ was at least 150.

Other alleged dullards represent a type often encountered in the old-fashioned Latin school, i.e., the youth who hated Latin and Greek but had a natural talent for science. Baron Justus von Liebig, German founder of physiological chemistry, was the despair of his language teachers. At 15 he left school and was apprenticed to an apothecary, because he wanted to be a chemist. At 17 he managed to enter a university and at 20 was awarded the Ph.D. degree. John Hunter, British surgeon and anatomist, left Latin school at 13 and spent four apparently idle years roaming the woods and fields, "watching the ants, the bees, the birds, the tadpoles and caddis-worms, pestering people with questions about which nobody knew or cared anything." Alexander von Humboldt and his brother Wilhelm, two years older, were privately tutored along the usual classical lines. Wilhelm liked languages and was early recognized as gifted; Alexander, caring only for nature, was considered mentally slow. Both became eminent, but Alexander outstripped his brother.

IN THE CASES just cited one notes a tendency for the direction of later achievement to be foreshadowed by the interests and preoccupations of childhood. I have tried to determine how frequently this was true of the 100 Cox subjects whose childhoods are best documented. Very marked foreshadowing was noted in the case of more than half the group – none at all in less than a fourth. Macaulay, for example, began his career as historian at the age of 6 with what he called a "Compendium of Universal History," filling a quire of paper before he lost interest in the project. Goethe's literary *juvenilia* are perhaps the most remarkable that have ever been preserved. Ben Franklin, before the age of 17, had displayed nearly all the traits that characterized him in middle life: manual skill, scientific curiosity, religious heterodoxy, wit and buffoonery, political and business shrewdness and ability to write. At the age of 70, when on a diplomatic mission in England, he dug up an article which he had written in his teens, published it practically without change and created a political sensation. At 11, French philosopher and mathematician Blaise Pascal wrote a paper on sound and was so interested in mathematics that his father thought it best to deprive him of books on this subject until he had first mastered Latin and Greek. Pascal secretly proceeded to construct a geometry of his own and covered the ground as far as the 32nd proposition of Euclid. At 14, Gottfried Wilhelm (later Baron) von Leibnitz was writing on logic and philosophy and composing what he called "An Alphabet of Human Thought." He relates that at this age he took a walk one afternoon to consider whether he should hold the doctrine of substantial forms.

Although in working with data of this kind the investigator must of course be wary (for even under the pen of a conscientious biographer the childhood period is likely to be colored by the halo of adult achievement), there are, however, few great poets who did not show unusual poetic talent before the age of 15, and the evidence is indisputable in the case of nearly all the musicians and hardly less convincing in the case of the others. ◆

PSYCHIATRY *and* PSYCHOANALYSIS

PSYCHIATRY

by Karl A. Menninger

ARE PSYCHIATRISTS DOCTORS? Yes, they are, first and last. But while it has always "belonged," psychiatry has been the Cinderella of medical specialties. For years she sat alone by the fire in the kitchen, while her proud sisters, Ophthalmology and Pediatrics, strutted in the parlor. Sister Surgery was there, too, quite the Queen of them all, forgetful of her humble origin in the barbershop, and Mother Obstetrics was never reminded of her poor relations, the Midwives.

When, by the Fairy Godmother's aid, the transformed Cinderella appeared at the Great Ball (the war), she outshone all her sisters. It was there she won the Prince's favor (popular esteem), and thereafter she came out of the kitchen, consorted with her fashionable and now deferential sisters and at last married the Prince.

This allegory is peculiarly apt. It sketches the development of psychiatry from the sterile, stagnant "asylum" period to the present unparalleled popularity of a specialty, which, because of its inclusiveness and its intimate relationship with all other branches of medicine, might even be considered the keystone of medical science.

The Fairy Godmother responsible for these great changes is a melioristic philosophy which kept alive embers of hope in the hearts of the early psychiatrists, whose task was generally regarded as hideous and hopeless. The patients relegated to them were the mad, the moonstruck, the lunatic, the alien, the devil-possessed, the idiotic, the demented, the insane. The very words are hideous, and their origins and meanings indicate the prevailing sentiments of aversion with which those afflictions were held.

Such feelings of aversion emanated from the hopelessness ignorantly ascribed to such cases, the helplessness of early medical science to understand or relieve them and the persistence of superstitions and religious hypotheses dealing with their origin, their relation to sin, devils, evil spirits and the like.

OF THESE, certainly the third has been the most powerful. Madness has for many centuries been taboo – i.e., both sacred and accursed. The taboo still attaching to it on the part of the rabble is betrayed by the archaic language of the law, but the progress of medical science and the extension of knowledge have lifted the taboo for the intelligent. The victims were found to be less hopeless than at first they seemed, and the increasing demands of civilization upon poor mortal frames increased their numbers. Familiarity replaced taboo with toleration and the crusading spirit of modern preventive medicine.

It was the far-visioned hopefulness and the indefatigable spirit of the early *innominata* who observed and examined and nursed and protected the "insane" that formed the bases of modern psychiatric prestige. In the years when leeches and bloodletting and purges were the stock in trade of the practicing profession, Pinel in France and Tuke in England and the 19th century reformer Dorothea Dix in this country were insisting that, all signs and customs to the contrary, the mentally sick were really human beings and deserved consideration as such and treatment for their sickness (about 1800). It was one step to substitute beds for heaps of hay – and another to replace whips and nakedness with even primitive decency and comfort. The progressive addition of sedatives, dietary care, nursing efforts, antisyphilitic therapy, hydrotherapy etc. followed slowly (1850-1900).

Meanwhile there were accumulating data of these allegedly sick persons – psychological data, historical data, chemical data. An American association was formed (1844) of those physicians interested in these phenomena. Notes were compared, cases reported, brains examined. Gradually an increasing nosology (delimitation and classification of disease forms) grew up. From the old unitarian conception of one kind of "madness" there was first a revival of the preceding Greek (Hippocratic) partitioning into mania, melancholia and dementia. Then all manner of varieties of each were described, and, what with kleptomania, pyromania, hypomania, monomania, acute mania, puerperal mania, delirious mania etc., together with similar multiplications of the melancholias and the dementias, the nomenclature of psychiatry became elaborate, formidable and useless. Accordingly, the balance of the medical profession, previously disdainful, was left astonished, bewildered, but none the less thoroughly convinced that psychiatry was an illegitimate child, still deserving of kitchen service in spite of these evidences of erudition.

IT WAS Dr. Emil Kraepelin of Munich whose synthesizing genius brought order out of chaos. In a series of editions of a comprehensive treatise he coalesced certain similar clinical pictures into what he regarded as disease entities, showing certain general similarities in origin, symptomatology, course, termination and pathology. From a mass of thousands of syndromes and names, he finally achieved a classification of approximately a hundred psychiatric entities, his most familiar creations being "dementia praecox" (schizophrenia) and "manic-depressive psychosis" (mania-melancholia). Kraeplin also deserves the credit for those atrocious names (about 1900).

During the first 20 years of this century these new formulations of Kraepelin's were engaging the attention of psychiatrists the world over and soon became the dominant conceptions. The doctors in state hospitals were chiefly engaged in observations and descriptions of cases to be placed in one or another of Kraepelin's groups. This indeed was the maturity of the era of descriptive psychiatry, the Golden Age of fundamentalism.

Characteristic of it was the descriptive and diagnostic attitude of the observers. The perceptual, intellectual,

emotional and volitional faculties were scrutinized in all their pathological variations; groups of symptoms and groups of cases were analyzed; brains were sectioned and stained and correlations of various sorts attempted between symptom and structure. The heyday of the branch of science called "neuropathology" was coincident and was the bridge of contact with the neurologists, private practitioners whose established respectability lent some prestige to the rising sister specialty. The elaborate brain-tissue-staining methods of Alzheimer, Nissl, Pahl, Van Giesen, Weigert and Cajal, previously applied to structural lesions of the cord and brain in traumatic, infectious and degenerative conditions, were applied in these increasingly interesting mental aberrancies. The poverty of results discouraged no one.

MEANWHILE the administrative attitude toward the mentally sick had steadily improved. Asylum provision was made increasingly comfortable, and the hospital rather than the asylum became the ideal. Pathologists and clinical directors were added to the staffs. Numerous therapeutic agents were added – pharmaceutical, hydrotherapeutic, electric etc. The small diagnostic unit (or psychopathic hospital) became the vogue in various states. Specialized institutions for certain forms of mental disease were established, such as hospitals for the epileptic and schools and colonies for the feeble-minded. This was the great era of the state hospitals. Diagnosis was the keynote.

World War I turned the tables. Entering at the back door, psychiatry emerged with enormous experience, enormous accomplishments, enormous prestige. The psychiatrists learned for the first time that they could be useful outside of asylum walls. They demonstrated that they had a province in war almost as extensive as (and little less spectacular than) the great realm of surgery itself. Unnumbered legions of patients with mental incapacities were referred to hastily organized psychiatric centers, not for mere labeling or diagnosis but for rapid rehabilitation. Thousands were sent promptly back to active service. The psychiatrists overcame their ancient sense of inferiority and demonstrated to themselves and to the world that they could do something, something more than labeling various types of institutionalized wrecks.

This practical demonstration of efficacy moved psychiatry into the major leagues of medical specialties. It established definitely the therapeutic, rather than the merely diagnostic, objective. This ushered in the beginning of modernism in psychiatry and ushered out old conceptions and terms such as "insanity" and "lunacy." Psychiatrists became physicians, healers of the mentally sick, and ceased to be "alienists," or mere legal quibblers and nominators. From keepers of the insane they became counselors of the unhappy.

Once, the mentally sick who needed to enter a hospital were necessarily made wards of the state, like criminals, and the formalities of commitment are still conducted in courtrooms in many places. But this is rapidly changing. All psychiatry was formerly practiced inside state hospitals. Now most of it is practiced elsewhere.

A few names stand out prominently among those whose spirit, energy and wisdom were responsible for guiding American psychiatry through this period of metamorphosis to its present pre-eminence. (European psychiatry lags far behind.) Among these, Thomas W. Salmon was the great ambassador who carried the cause of psychiatry to the courts of scientific and popular opinion with dignity and charm. Adolf Meyer has patiently expounded the didactic principles of psychiatric science to thousands of students. Smith Ely Jelliffe and William A. White courageously carried the new ideas of psychiatry into the old forms and into neurology and other branches of medicine as well. But the greatest genius of all, the man who in my opinion is more than any other one responsible for the extension of psychiatry from the laboratory and the asylum to the fireside and the market place, was Elmer Ernest Southard. His untimely death at 43 has made his name less familiar to many than the principles he introduced, but the inspiration imparted to those fortunate enough to have been exposed to his amazing intellect and his kindling enthusiasm still carries on.

Thus, from exclusive application to those patients with obvious and extreme psychopathology, psychiatry was gradually extended to other fields – criminology, sociology, pedagogy and now, recently, with increasing intensity, to its parent field, general medicine. To it psychiatry has brought techniques of approach to the patient, of personality evaluation and of therapeutic management, with which general medicine, for all its perfection of laboratory procedure and clinical measurement, had been only vaguely familiar. Here and there an intuitive old general practitioner had discovered for himself in the "art" of medicine the importance of dealing with the *feelings* of the patient and of influencing his recovery by a proper consideration of these intangibles. But psychiatry, with the aid of psychoanalysis, has made progress in the reduction of this intuitive technique to systematic, scientific principles, the application of which need no longer be limited to a gifted few.

AS A RESULT, the emphasis on *psychological* factors in disease (as in health) is slowly permeating the entire practice of medicine. No longer the exclusively *chemical* concepts of the Middle Ages and earlier, or the chemico-physical concepts of the 19th century, but, happily, concepts of interacting physical *and* chemical *and* psychological factors now characterize the theory and practice of medicine. Once it was considered ridiculous to record a temperature; later it was considered ridiculous to examine a specimen of urine; and when these procedures became generally accepted, it was still considered ridiculous to inquire into the details of a patient's dream. Now we know that dreams and urine and fever may and *must* all be examined if we are truly and fully to understand a patient.

No intelligent or informed physician thinks any of these procedures absurd today – even though in practice he may sometimes omit one or several of them. For every thoughtful physician knows that psychological factors are as real and as effective as physical or chemical factors. His training, however, makes him feel more proficient and sure of himself in the old traditional modalities of physics and chemistry, and he is often afraid to venture into the psychological investigations that he fully realizes his patients merit and need.

The result is that certain rather sharp differences persist in the points of view and techniques of most medical men, on the one hand, and psychiatrists on the other. The psychiatrists sometimes feel that they alone actually look at the human being as a whole, instead of as a creature with certain extraneous pathological attachments or invasions. The general medical man, on the other hand, suspects the psychiatrist of ignoring or underestimating physical and chemical data and of exaggerating psychic factors beyond their proper degree of importance. They think, too, that psychiatrists are apt to see the whole world a little askew, as if all people were "more or less crazy," and this strikes them as ill-founded and distorted.

Then, too, the time concepts of the psychiatrists and most other medical specialties (phthisiology and orthopedics excepted) differ considerably. Psychiatry, along with the two specialties mentioned, thinks in long-time terms; treatment extends over a long period; prognosis considers a long interval; the patient's whole life, rather than an acute episode or relatively brief illness, is under consideration.

Again, the patients with whom psychiatrists deal are still, unfortunately, under some degree of social taboo which does not apply to the patients of most other specialties, that of the urologists perhaps excepted.

Finally, the psychiatric modalities depend more upon aural than upon oral ministrations. Words – i.e., ideas – are now "poured into" the patient rather than drugs, with, however, no less palpable – often identical – effects. This is a difference which the general medical man accepts with grave misgivings, because he feels suspicious of anything which resembles, even remotely, the unsavory procedures of quackery and faith healing. Unfamiliar with the deeper mechanisms of psychological reactions, he cannot understand the therapeutic results which shrewd cult-leaders often obtain but has a strong feeling of condemnation for them because of their unscientific and often obviously dishonest methods. Because psychiatrists work with the same raw material and must use scientifically some of the tools which have fallen into the hands of unscrupulous and unreliable persons in some instances, the reproach attached to the faith healers has often been turned against the psychiatrists unjustly.

BUT THE ESSENTIAL DIFFERENCES that yet separate psychiatry from general medicine go deeper than this. To the psychiatrist, how the patient acts and reacts (behaves and feels) is important data. To the average physician, it is not (or has not been).

For example, a cardiac patient may describe in detail his subjective reactions during a movie or while visiting his uncle; in either case the average physician listens only from courtesy, if at all. The psychiatrist, on the other hand, puts great stock in such data. Similarly, the psychiatrist is just as interested in how a patient reacts to the taking of a physical examination as he is in the other data obtained from such a physical examination. He is just as interested in observing what the patient's emotional reactions are toward his office nurse or the hospital manager or himself as he is in discovering what the patient's blood pressure or leucocyte count or vital capacity may be.

The psychiatrist considers it the first task of a physician to observe these ordinarily neglected data, to recognize them, to appreciate that they have meaning, to seek this meaning, to try to evaluate them. He feels that only if he has done this can he decide what should be done next with any degree of scientific precision. This "next" may be a chemical manipulation, a mechanical adjustment or psychological therapy.

THE QUESTION naturally arises as to whether there is any justification for attempting to bring closer together the viewpoints of the physicians and the psychiatrists. Is it or is it not helpful to consider the instinctual, purposive, emotional factors in general medicine? To the physician they seem unnecessarily elaborate and cumbersome. To the psychiatrist it seems impossible to ignore them with scientific justifiability. Both physicians and psychiatrists are likely to fall back upon the explanation that after all they are dealing with different sorts of patients entirely. But is this really true?

I should not go so far as to say that there is not some pragmatic value in the distinction that is made between patients who consult psychiatrists and patients who consult general practitioners, but I am certain that these groups are not separated so widely as is ordinarily assumed. The fact of the matter is that the psychiatric approach has never been applied in any systematic or extensive way to the general medical cases confronting the general practitioner. Rapid progress in this direction, however, is now being made, and many internists have become interested in psychiatry by way of the catch phrase "psychosomatic medicine." To speak of the emotional factors precipitating arthritis, the psychology of colitis or the psychotherapeutic cure of gastric ulcer would have been regarded as prima-facie evidence of lunacy or chicanery a few decades ago. Yet all these have been matters of serious scientific consideration by eminent physicians within the past few years.

Only a few years ago no medical schools taught psychiatry. Now all medical schools give required courses in psychiatry, and some of them do more than teach students the names of the major psychoses. Some of them present personality defects, the nature of adjustment failures, problems in "child guidance" and the mechanisms of personality breakdowns. This is very wise. For the vast bulk of psychiatric treatment is done, not in state hospitals and not by privately practicing psychiatrists and not by the various free and pay clinics, but by the general practitioners and family physicians.

IT IS THEY who have the constant contacts with patients whose minor nervous ailments, whose infelicities and inefficiencies, whose psychological and psychologically produced aches and pains, bring them to the doctor for help. The majority of these he can and does benefit. Here and there will be an exceptional case which is too complex and must be referred to a specialist, just as major surgical cases are referred to a surgeon. Minor psychiatry, like minor surgery, the general practitioner can and must do. But some day it will be considered just as heinous for a family doctor to neglect a case of melancholia as it is now for him to neglect a case of appendicitis. ♦

PSYCHOANALYSIS

by Karl A. Menninger

WHILE PSYCHOANALYSIS IS, to be sure, a *technique* of subsurface exploration, it has come to mean other things as well. It is primarily a method of *treatment* for certain kinds of mental illness – this is how it was discovered. It is also a method of *research*, not only in psychology, but even in anthropology, comparative religion and other social studies. Moreover, it is a body of scientific data and hypotheses, representing a certain dynamic point of view in medicine and psychology, and both are vastly richer and more fertile for its contributions of the past few decades.

Practically no intelligent and informed scientist today disputes the main theses and findings of psychoanalysis. There is still much controversial matter, and unhappily the problems already unearthed are proving to be exceedingly complex, so that few will be able to follow where even fewer may lead.

The original discovery of psychoanalysis and its subsequent development by Freud have already been referred to. It is incorrect by all standards to refer to various "schools of psychoanalysis"; by definition there is only one psychoanalysis, and that is Freudian. The various men who originally worked with Freud and subsequently developed their own methods of psychological investigation or treatment do not themselves call their work psychoanalysis or regard it as related to psychoanalysis, and no one else should. Psychoanalysis, on the other hand, is a standardized scientific discipline, standardized to a much higher degree of precision (so far as its clinical application is concerned) than most people realize . . .

To become a psychoanalyst one must first of all be a physician. He must have had psychiatric training. He must have submitted himself to a psychoanalysis at the hands of an analyst recognized as competent to give such didactic training; he must have participated in a stipulated number of case seminars, attended representative courses of lectures and acquainted himself with the psychoanalytic literature to the point of being able to sustain an oral examination on the theory. Furthermore, he must have carried through the psychoanalysis of at least four patients under the weekly supervision and control of a competent training analyst. Finally, in most societies, he is also required to have presented an acceptable thesis or presentation in psychoanalysis and to have practiced under the surveillance of the group for a period of time.

After this he is eligible to associate membership in a psychoanalytic society and entitled to call himself a psychoanalyst. Later, if approved, he is made a full member. Such high requirements for specialization exist in no other branch of medicine, to my knowledge. ♦

PSYCHIATRIST *and* PATIENT

by Louis Paul

WE SHOULD KEEP FOREMOST in mind that the psychiatrist is first of all a physician, a healer, one who treats sick people, one who tries to restore the sick to health. Like any other medical practitioner, he sees people who have pain, who are suffering. Those people who consult a psychiatrist come for relief of this pain and suffering as much as those who go to any doctor of medicine.

How do these sick people who go to a psychiatrist describe their pains and sufferings? One has severe headaches; another has periods of painful tension or nervousness or anxiety or panic; another is afraid to go out into the street alone. Some come because they have stomach pains, or because they eat too much or drink excessively. Others are depressed or unhappy or dissatisfied in their work. Others can't get along with their wives, or husbands, or parents and are irritable, moody and confused. Others feel inadequate or have difficulties in their sexual relations. All of these people have pain and suffering in one way or another. Their pain hurts like any other pain; there is no such thing as an imaginary pain or a pain that is "all in your head." Pain hurts—whatever its source.

An illness involving feeling, emotions, thoughts—a disease or a *dis-ease*—is an illness like any other illness, and the appropriate treatment should be sought and sought early.

Now for some brief comments about psychiatric treatment. What does the psychiatrist do to relieve pain and suffering and restore the patient to health? He has all the medicine and other therapeutic weapons available to the medical profession. He uses medicine to relax or to stimulate. He utilizes the various shock treatments when they are indicated. These and other physical methods of treatment you have probably heard about. It is around the psychological methods that mystery has gathered.

Words can heal. Words can kill. We use a kind of shorthand, of course, when we say *words* kill or heal. It is the person's total reaction to the meaning or context of the words that kills or heals. Language is acquired very early in life, during the first two years, and words are given powerful subsurface, often magical, meanings which can do damage.

Here is an example: A physician once told a patient that her doctors finally understood her disease. I saw the patient soon afterward because she had become upset and anxious. What had disturbed her was that she had been told she had a *disease*. To her, "disease" meant only one thing – venereal disease. She was upset because she thought the doctors would think she was promiscuous.

Squarely in the center of psychological treatment is the act of communication, the interaction and exchange of thoughts and feelings. Considerable mystery is connected with psychiatry, and part of this mystery is based on the solid fact that psychotic and neurotic behavior are strange and not easily understood phenomena—familiar only to clinicians who study and work with them.

While the content of psychiatry may be unfamiliar, its form or its structure, as presented in psychiatric examination and psychotherapy, need not be strange to anyone. That aspect of psychiatry is an act of communication, an exchange of thoughts and feelings between people, an interpersonal relationship similar to those we all engage in every day.

Now, in what ways is communication going on? In what ways are messages passing back and forth? What is being transacted? What information is being exchanged?

1. The aggregation of symptoms may resemble the pattern of a recognized psychiatric illness. An identifying label or diagnosis can then be attached to the case. The physician gives meaning and significance to the presence and arrangement of certain symptoms.

2. The psychiatrist attaches significance to the patient's gestures, intonation, facial expression, grooming, bearing, grammar, choice of words etc. Everything the patient does can be understood to express something about his character and his defenses against anxiety. Perhaps you have noticed the ways people walk down a corridor—some, near the wall, as if they were about to lean on it, others, straight down the center. The way a speaker strides onto the platform can be revealing. This *nonverbal* communication, laymen often tend to neglect. The psychiatrist cannot neglect it.

3. What the patient fails to mention may have special importance. Most of us dislike talking about events of which we are ashamed, fearful or sensitive. In telling our life's story, we "forget" episodes that gave us mental pain. Freud, of course, first recognized the significance of these lapses and utilized this observation about gaps in a patient's story to develop the methods and principles of psychoanalysis.

4. What does it mean to come to a psychiatrist? This is another area in which communication prevails. What does it signify to the patient in terms of guilt, loss of self-esteem, shame, time, money, family relations etc. to undertake psychiatric treatment? The answer will be found in all the things the patient does and says and feels during and after the treatment sessions. The personal and social consequences of coming for treatment are a major factor in that treatment.

The patient directly or indirectly asks for help. He invests the physician with a mantle of power and authority and frequently has magical expectations regarding treatment. Secretly he expects to have something done *to* him, not realizing he will have to work hard on himself to get well.

5. Communication is not a one-way street. The physician is communicating with his patient also. By considerate listening, he conveys his acceptance of the patient as a person and of the patient's verbal and nonverbal productions. This does not mean that he approves the content of these productions but that he considers them worthy of attention. A demonstration and an extension of this acceptance are given when the psychiatrist arranges to see the patient in regular sessions for months or years. When a physician who ordinarily sees several patients in an hour devotes such a large block of his time to a single patient, it becomes a significant cultural fact.

6. In numerous other ways—tone of voice, facial expression, type of question etc. – the psychiatrist demonstrates interest in the patient and his commitment to the patient's welfare. The patient's response to this handling comes to occupy the center of the treatment stage. Emotional re-education, or a corrective emotional experience, is made possible by the professionally neutral behavior of the therapist.

7. There is mutual communication between patient and psychiatrist in yet another way. "Unconscious" speaks to "unconscious." There are reactions, feelings, values and assumptions of which we are not ordinarily aware, and we speak of these as unconscious. The psychiatrist is especially trained to detect these unconscious evaluations and emotional trends, and he uses his own unconscious processes as an investigative and therapeutic tool.

As the patient tells his story, the psychiatrist reconstructs the pertinent events in the patient's past life, filling in gaps and recognizing psychological trends. In the case of a young man who felt uneasy in public places, it may have become apparent that he had strong tendencies toward self-display and that his ability to control these exhibitionistic impulses was threatened whenever he was in a group, as this increased the strength of the unacceptable impulses. The threatened emergence of forbidden impulses produced anxiety. The psychiatrist would gradually point out these impulses to the patient, and together they would explore the reasons for the intensity of the impulses and the patient's inability to deal with them without anxiety.

I have indicated ways in which there is communication or verbal and nonverbal exchange in the doctor-patient relationship of psychiatry. Obviously, there is a great deal more transacted between them than words. There is a transfer to the psychiatrist of attitudes, fears, loves and hates distilled from the patient's life and representing his current methods of dealing with people. There is an emotional transaction between patient and doctor via unconscious routes. The physician gives emotional support and acceptance by listening and by apportioning regular periods for treatment. He points out pertinent behavioral trends and reactions to the patient and interprets to the patient the significance of the behavior.

The experience of communication in psychiatric treatment enables the patient to improve his own ways of recognizing and expressing his feelings and thoughts. He comes to see the powerful role of communication in all interpersonal relationships. ♦

RELIGION *and* PSYCHOLOGY

by Joshua Loth Liebman

THE FAITH-HUNGRY HEART, beating plaintively in a world of confused struggle and flight, no longer asks, "What shall a man believe?" So enormous and critical is the problem, that mere intellect has been transcended; we seek not a credo or a doctrine but a *reality* that will sustain us in the battle. We wish to discover, if possible, a core of *being* around which we may integrate ourselves, an armature on which we can wind the immortally charged threads of personality and character.

The elements of this incorruptible fusion lie serviceably at hand in the revealed and joint truths of religion and psychiatry. Unfortunately, however, a number of persons exist – imperfectly or partially instructed – who either quail or balk at the idea that religion and psychiatry can ever agree on the terms of man's salvation. Religionists are likely to be suspicious of psychiatry, and psychiatry, on its part, has often been intolerant or contemptuous of religion.

The prophets could never have conceived of religion in such narrow and exclusive terms. God for them was infinite concern for the good life – and all human and social fulfillment within that life. Great philosophers in religious traditions welcomed rather than feared the helpful insights of science and metaphysics. Philo took much from Plato; Maimonides and Aaron ben Elijah were greatly indebted to Aristotle.

On this question perhaps we cannot escape temperamental differences. Some men constitutionally want religion to be confined to mystic experience with "The Wholly Other." But others of us, who look upon God as the source of salvation, would regard religion as inadequate and intolerably circumscribed unless it concerned itself with the foreground of life – namely, man, with his moral and social duties. To us, communion with God is not merely a private absorption in the eternal Thou; rather it bids us to return to the workaday world and sanctify it by all the means in our power. Such sanctification necessarily involves the use of all means that fumbling humanity has discovered in its long journey – the instruments of physical and social science, the sharp-edged sword of philosophy and, now, the healing instruments of psychology.

THERE IS A FEAR in the heart of many religionists that these scientific techniques might overshadow religion and even absorb its historic functions. Again and again, the world has witnessed the shrinkage of religion's domains because of the expansion of science. For example, men once turned to God in prayer for rain. Now they turn to the Department of Agriculture for irrigation. Men once turned to God for escape from poverty; our age relies upon technology and industry and economic manipulation to bring abundance.

The approach of many religionists to dynamic psychology is really filled with both fear *and* misunderstanding. There is suspicion, for example, that psychology will analyze away all our human ideals and moral values, will reduce them all to some childish complex or to some infantile phobia. The truth is, however, that psychology will remove only the *infantile* aspects of our fears, frustrations and hatreds – leaving all that is strong and mature in us as the foundation for future building.

It is undeniable that some of the great pioneers of psychiatry were antagonistic to religion. But it is clear that one cannot condemn all of religion because of a minority of fanatics and zealots, any more than one can condemn all of psychiatry because of the minority of charlatans who practice in its name. When we speak of psychiatry, we should refer to its most representative and most gifted practitioners and its well tested truths rather than its occasional aberrations, extreme hypotheses and speculations. Likewise, religion must be viewed in terms of its saints and sages and its profound and well tested moral and spiritual laws and practices, rather than its tragic aberrations, intolerances and bigotries.

UNDER NO CIRCUMSTANCES, however, is the fear justified that psychiatry can ever take the place of religion or render the spiritual realm obsolete. While the insights of psychiatry can be helpful to all people, psychiatry necessarily concerns itself with the abnormal, the neurotic; its main purpose is to achieve therapeutic results with maladjusted people. Religion, on the other hand, deals with men and women of all degrees of adjustment. One of its primary purposes is to bring integration and happiness to normal human beings, to give them the courage, the strength and the serenity necessary for the good life – a purpose neither conflicting with, nor threatened by, the aims of psychiatry. Psychology must not be viewed as a competitor of religion – any more than the science of optics should be regarded as a competitor of normal vision.

The fear that psychology will take the place of religion is baseless; although the twain meet at many points, they differ profoundly both in goal and in substance. It must be understood that psychology and psychotherapy are scientific disciplines not basically concerned with moral judgments, whereas religion inevitably lives in the realm of ethical concepts. Psychotherapy is committed to utter neutrality in moral affairs and goes beyond its province when it makes "value judgments" about the total meaning of life. Religion, on the other hand, fails in its spiritual duty when it does not give men and women perspective about their place in God's plan.

But with all its successes, psychiatry has no authority to speak about the eternal anxieties of men concerning the nature of God and the trustworthiness of the universe. It takes religion and religion alone to assure men that "the world has a character which justifies hope and serenity."

And, finally, religion must paint the larger canvas of universal and eternal meaning. Psychiatry necessarily deals with the finite, the limited, the partial, aspects of existence. Re-

ligion alone can give men awareness of the infinite and the sense of the total significance of life — a precious relatedness to the wider frame of purpose and perfection.

The fact that the sanctuary has its unique contribution to make to the world does not mean that it should refuse the helpful hand of a great ally — the psychological clinic. Rather should it rejoice in the assistance which psychological understanding can give to every divided soul. When that soul is integrated and healed, it is released for the first time to participate in creative religious experience free from morbidity.

We must always keep in mind the limitations of dynamic psychology. It can help to liberate men from shadow fears, but it can never transform them into angels. It certainly does not guarantee to make them happy — but only less unhappy than they now are. Psychology understands quite well that a degree of unhappiness, discontent and conflict is inevitable to our finite species. It seeks to reduce the amount of this unhappiness, at the same time realizing that certain difficulties must remain as long as man is what he is. It knows that it can only prepare the ground for the good life but cannot of itself guarantee goodness. Such a guarantee can be provided only by religion and its compelling goals.

Nor is the new psychology a panacea for human ills. It often ignores the social sources of human misery, the wars and poverty of men. It will never take the place of religion, any more than biology or physics has taken the place of religion. But its insights can give to modern religion a new wisdom about the laws of individual and social health. The discoveries of the psychiatrist's clinic in the field of interpersonal relationships should inspire religion to stress new principles of human action, to sanction new approaches to the self, to society and to the universe.

In order to achieve the good life, men need to believe in themselves and in human nature generally, to accept as normal the pluralism of their moods and capacities, to understand in a new sense the danger of pride, to possess some ideal human personalities with whom they can identify themselves and to realize that emotion as well as reason is indispensable in the attainment of inner serenity and social salvation. On every one of these points — the nature of man, the sin of pride, the proper role of the hero in character development, the legitimacy of feeling — religion can gain some valuable aid from the best psychiatric clinics of our time and can use its influence with human beings to teach millions of normal men and women fundamental new truths about their psychic and moral needs and duties. ◆

The Commandments of MODERN PSYCHOLOGY

by Joshua Loth Liebman

Thou shalt not be afraid of thy hidden impulses.

Thou shalt learn to respect thyself, and then thou wilt love thy neighbor as thyself.

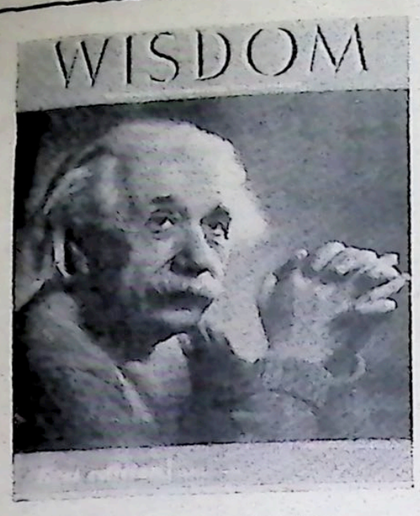
Thou shalt transcend inner anxiety, recognizing thy true competence and courage.

Thou shalt stand undismayed in the presence of grief. Thou shalt not deny the sadness of thy heart. Thou shalt make no detour around sorrow but shalt live through it, and, by the aid of human togetherness and comradely sympathy, thou shalt win dominion over sorrow.

Thou shalt eternally respect truth and tell it with kindness and also with firmness to all thy associates, to the young child as well as to thy brother, and through truth shalt thou find healing and salvation.

Thou shalt search thy heart for the traces of immaturity and the temptations of childishness. Thou shalt reject all flight from freedom, all escape from maturity, as unworthy of thy person. Thou shalt turn away from all supine reliance upon authority, all solacing slavery to an omnipotent social father. Thou shalt seek together with thy brothers a kingdom of mature equality.

Thou shalt uproot from thy heart the false doubts and childish petulance which keeps thee far from God. Thou shalt not make Him the scapegoat for thy emotional wounds and thy psychic scars. Thou shalt free thyself of the distortions which block thy way to His presence, and by that freedom thou shalt commune at last with Him, the source of truth, the giver of peace. ◆



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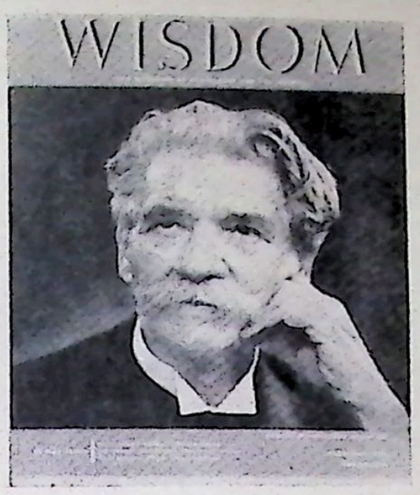

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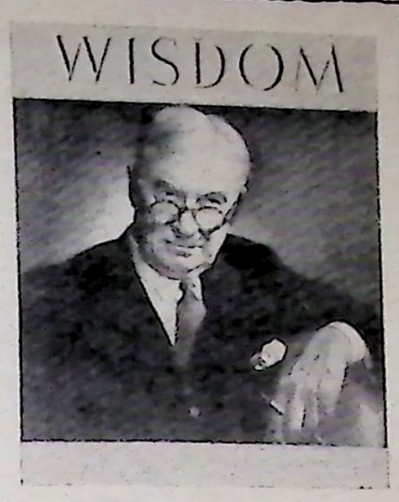

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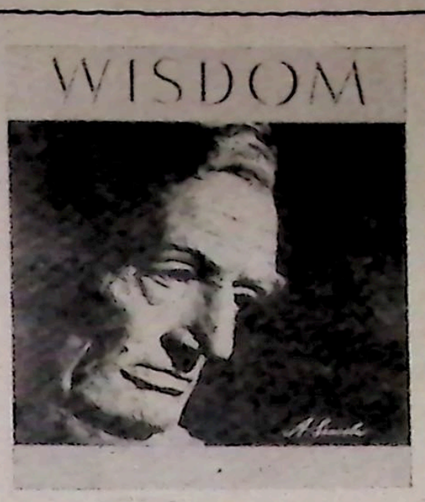
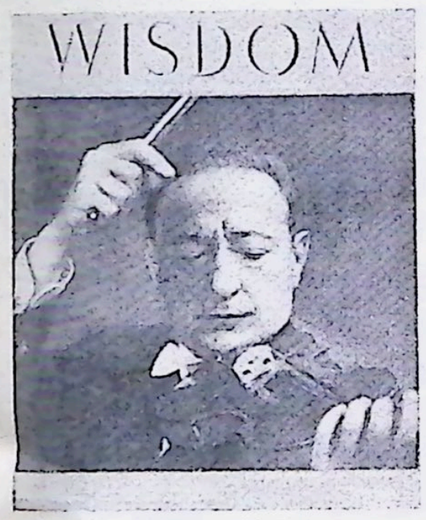


ABRAHAM LINCOLN

The Greatest Gift of All



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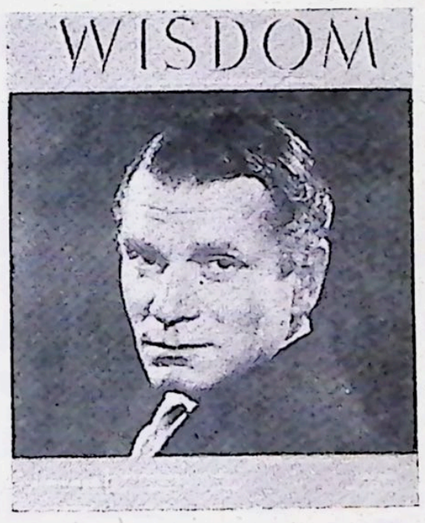

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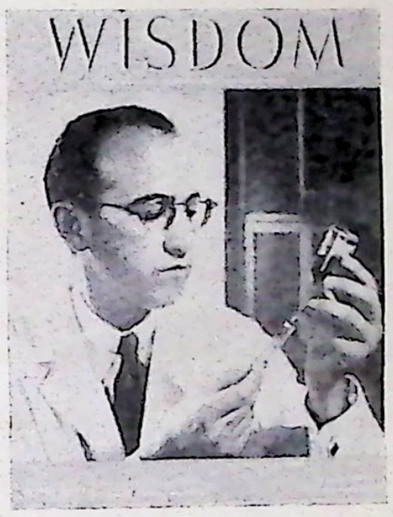

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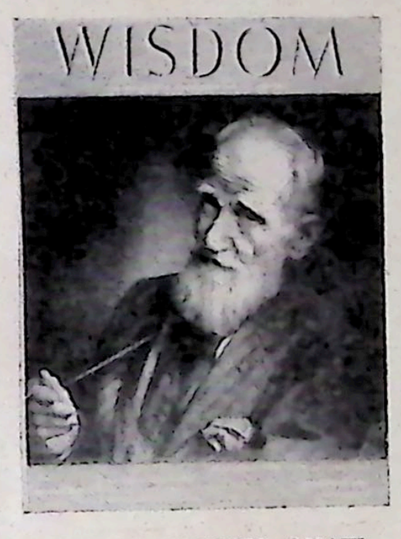

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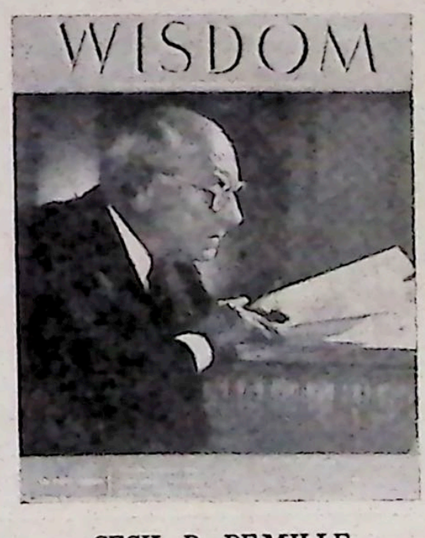

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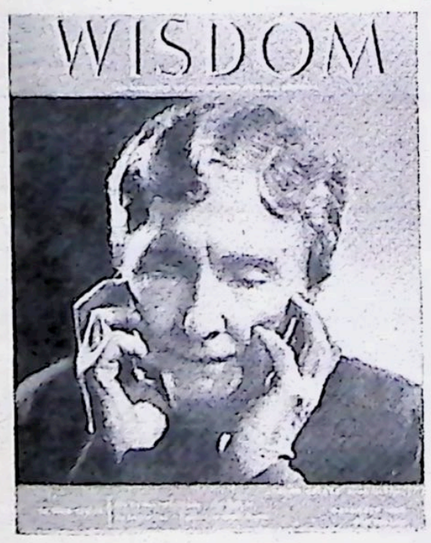

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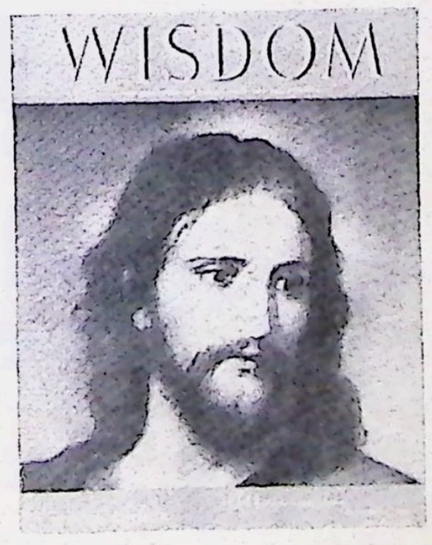
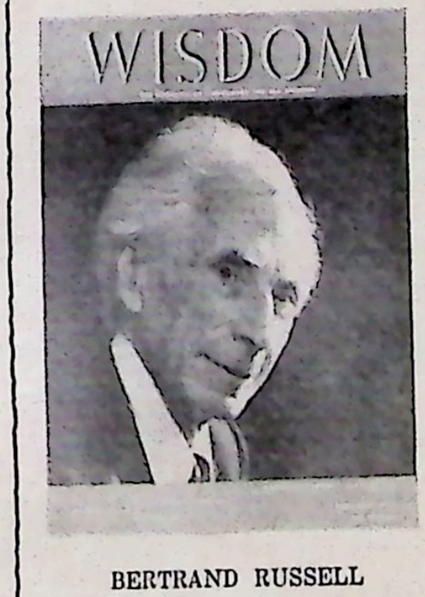


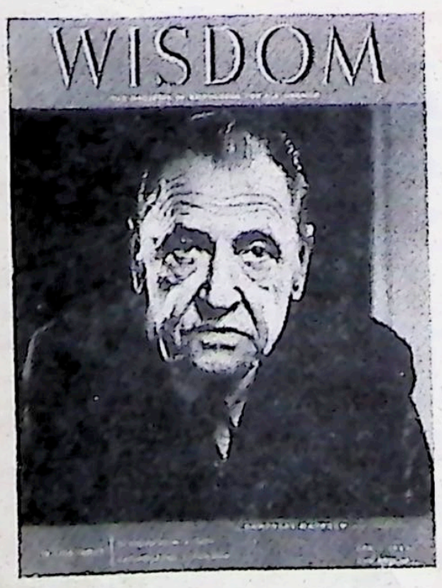
JESUS

THE THINKER



BERTRAND RUSSELL

ARTUR RUBINSTEIN



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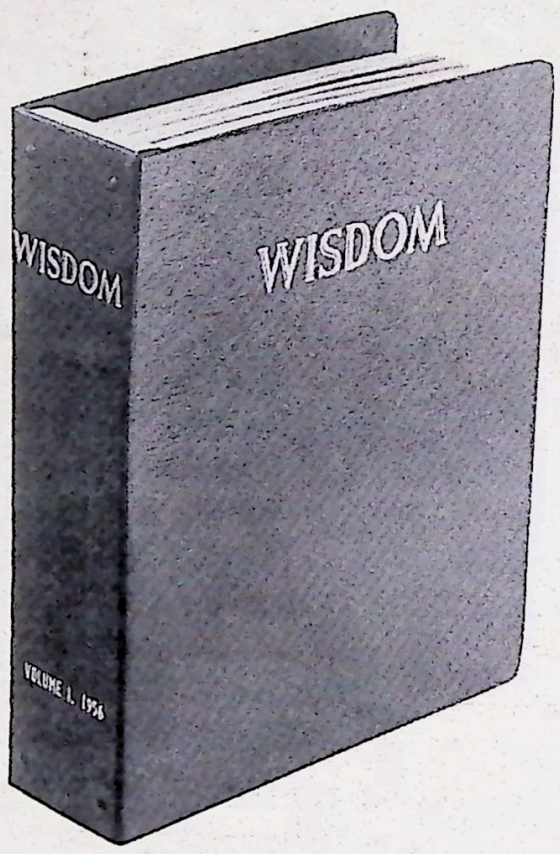

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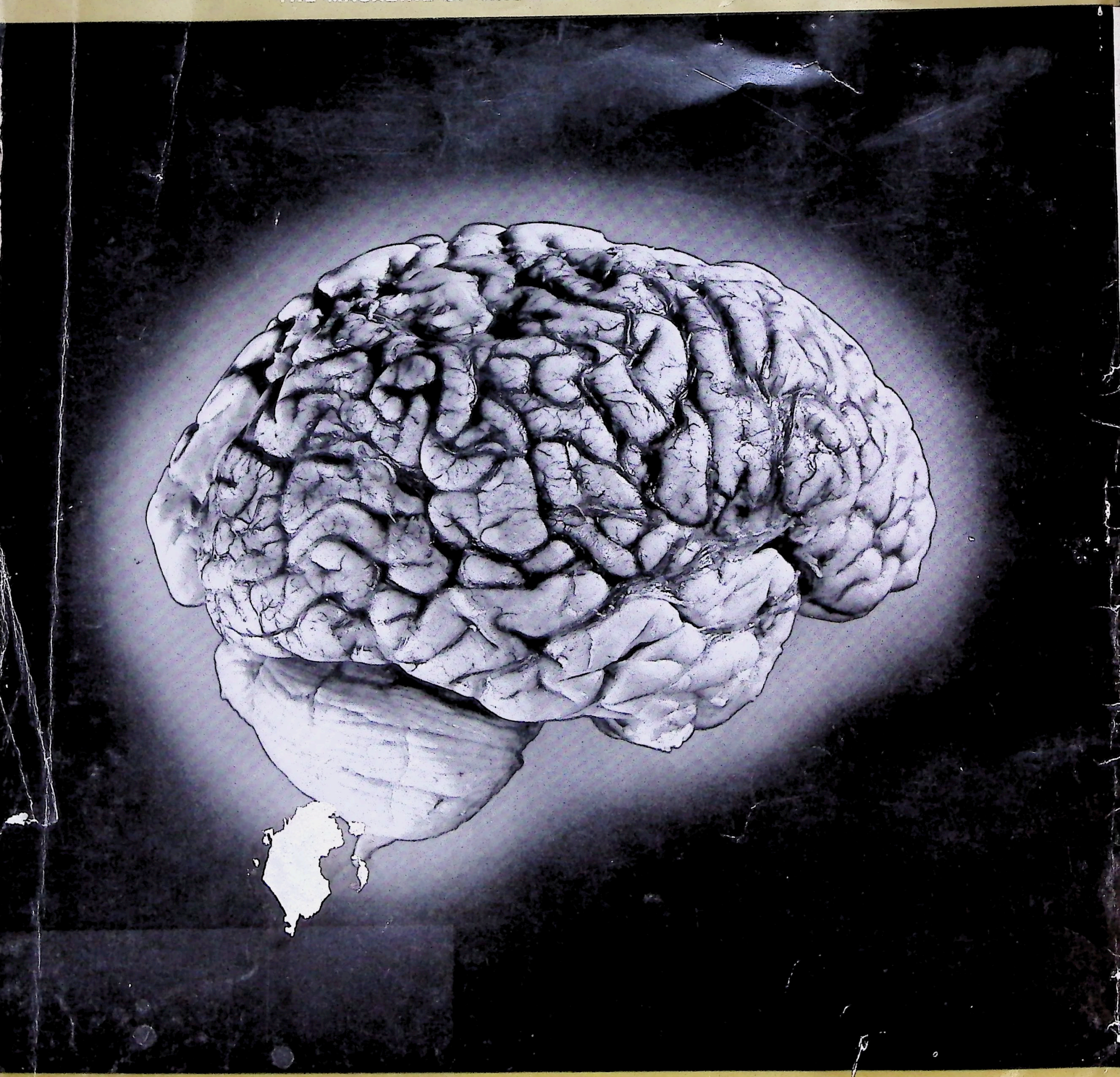

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